



BULLARD MEMORIAL WINDOW  
 ERECTED IN THE GENERAL LIBRARY, ROGERS BUILDING  
 BY THE CLASS OF 1887  
 JUNE 4, 1906

# technology review

Published by MIT

This PDF is for your personal, non-commercial use only.  
Distribution and use of this material are governed by copyright law.  
For non-personal use, or to order multiple copies please email  
[permissions@technologyreview.com](mailto:permissions@technologyreview.com).



# The Technology Review

VOL. VIII.

JULY, 1906

No. 3.

---

## THE BULLARD MEMORIAL WINDOW.

A new feature was added to the physical aspect of the Institute upon Commencement Day in the memorial window given by the Class of '87 as a Memorial to the late Frederic Field Bullard. The gift was, both in its purpose and in its embodiment, a unique contribution. It is the first time any class has cared to take definite steps toward perpetuating the memory of one of its members, and it is also (with the exception of the restorations of the frieze in Huntington Hall and the drinking fountain in the hallway of Rogers) among the first attempts to minister to the somewhat starved æsthetic needs of the Technology environment.

That Bullard richly deserved this tribute of love and admiration goes, of course, without saying; and it is well that this piece of color and symbolism should stand for the education of that true "Tech" spirit which is to come. Bullard identified himself with the so-called spirit of the Institute in many ways, and, at a time when it was most needed, infused life into the solidarity of the undergraduate body. His work at the Tech Union is not yet forgotten, and, working as the coadjutor of President Pritchett, he built up the "Kommers" spirit which made that organization a success. The Tech Song Book was originated and edited by Bullard, and to it he gave many of his best compositions, including the "Stein Song," upon which his popular favor was based. Bullard's heroic work at the great Tech Reunion of 1904 is not yet forgotten, and it achieved special

emphasis from his death almost as soon as that work was over. No Tech student or graduate has ever had better claims to a public recognition of his worth to his Alma Mater.

The window, while simple, adequately typifies Bullard's phases of work as a student in the chemistry course, as the leader of the Tech Union, and as a musician. For a fitting eulogy the committee from his class chose the words once used by Kipling in his tribute to Wolcott Balestier,—“Simplicity and Gentleness and Honor and Clean Mirth.” The window was designed and executed in the old manner by Harry B. Goodhue, of Cambridge, a personal friend of Bullard's, and who contributed, as his own share in honoring his friend's memory, far more work than was actually paid for.

In looking for a location for the window, the old Biological Laboratory, now the General Library, seemed to be best fitted, as being a central and general meeting-place for the students. The windows, topped by lunettes, are admirably adapted to such decoration, and the hint once given will doubtless be followed by other classes until this room becomes the natural memorial hall wherein may be erected other such offerings.

It was, indeed, with something of this in mind that the committee decided upon this form of memorial; for it has seemed to many that the grim and severe scientific aspect of the Technology might well be brightened and be made beautiful by the addition of some such color and interest. The Tech's stern discipline and its chill social atmosphere have begun to give way to less harsh ideals, and it is to be hoped that the Bullard window may have some such effect upon the material, as his life did upon the spiritual, needs of the Institute.

## ALUMNI REPRESENTATION IN COLLEGE GOVERNMENT

### A STUDY OF METHODS

The recent election by the Corporation of the first "term members," from nominees chosen by letter ballot of the alumni, completed the inauguration of alumni representation in the government of the Institute. In accepting the privilege of nominating nearly a third of the members of the Corporation, the alumni have assumed new and grave responsibilities. Most obvious of these is that of insuring that their nominees shall be invariably fit; and this is scarcely to be accomplished, permanently and with certainty, unless these representatives are chosen under a well-considered plan. For whatever assistance it may afford in judging of the plan adopted for the Institute, this study of alumni representation in the government of American colleges is here presented.

The data for this study were compiled during the latter half of 1905 by the Technology League for the information of the several bodies then studying plans of alumni representation in the government of the Institute. College publications, and correspondence and interviews with officers of the colleges and with representative alumni, furnished most of the information. An excellent article on "Alumni Representation in College Government," by Samuel H. Ranck, published in *Education* for October, 1901, giving the results of a study of this subject made in 1900 for the alumni of Franklin and Marshall College, and Mr. Ranck's personal correspondence on the subject, which he generously loaned, were freely used. The institutions studied, seventy-two besides the Institute, are intended to be fairly representative of American colleges, universities, and technological schools. They include colleges for each sex and for both sexes, old schools and young, and are in nearly equal numbers under denominational, non-sec-

tarian, and political (*i.e.*, city or State) control. In the accompanying tables is given a digest of the information obtained, for each college reporting any measure of alumni participation in its government.

Some participation of alumni is almost universal in American college government to-day. Only 7 out of 73 colleges are without it. Of these, 3 are under State control and 2 are private foundations established since 1890. This participation is often that of individuals chosen, not primarily as representatives of the alumni, and not as the result of any action by the alumni body, but as men conspicuously fit and devoted to the school. In one-third of the colleges reporting, the alumni participate in the government only in this informal way. (Colleges 43 to 66 in the tables.) Of these 24 colleges, 14 are under city or State control, two-thirds of all the colleges under political control being in this group. Whether under political or private control, the number of alumni on the governing boards of these colleges is often large, averaging for the entire group 35 per cent. of the membership of these governing bodies; and at Columbia University (No. 45), University of Iowa (50), University of Michigan (52), New York University (56), Rensselaer Polytechnic Institute (59), University of Virginia (61), and University of Wisconsin (64), alumni \* constitute from one-half to nearly all of the trustees. This, however, is but the participation of individuals, not alumni representation, and does little to conserve the alumni interest, unlike that formal representation by representatives chosen by the alumni themselves, with which this inquiry is chiefly concerned.

Formal alumni representation has achieved its present wide adoption during the past forty years. First put into operation at Harvard College in 1866, it is to-day typical of the government of American colleges. Of the 73 colleges investigated, the alumni are now formally represented in the government of 42; and other colleges anticipate such representation when their alumni shall have become more numerous and more mature. Of the city and

\* The word "alumnus" is used throughout in the broad sense of one who has been a student, not in the limited sense of a graduate.

State colleges, few have established alumni representation, since, in general, the incentives to its establishment are less and the difficulties of establishment are greater than in colleges not under political control. Of the colleges under private control, three-fourths have established some form of alumni representation.

This representation takes one of two general forms, according as the alumni representatives are members of the board of trustees or of a separate body. The former plan is the more usual, representation being on the board of trustees in 35 out of 41 colleges. (Colleges 1 to 27, 34 to 39, 41 and 42.) Except in a single college (13), these alumni trustees have the same powers and duties as other trustees. They have, in addition, the very important function of keeping the alumni authoritatively informed of the condition of their college, its aims, its problems, and its needs. At Rutgers this function is made an official duty, the alumni trustees being required to report in writing to the annual meeting of the Alumni Association.

The second plan, that of representation upon a separate body, is followed in six colleges. Of these Bowdoin College (29), Harvard University (32), and Tufts College (33) have boards of overseers, bodies co-ordinate with the trustees. The powers and duties of these boards of overseers are not uniform, and are not always well defined. In general, however, these are examining and reviewing bodies, scrutinizing the internal work of the college through their visiting committees, and exercising a veto over all important appointments and certain other acts of the trustees, though they may not originate business except by recommendation. At Harvard, where alumni representation has been longest established and where it is eminently successful from every point of view, practically all important acts of the President and Fellows require the approval of the Overseers. Representatives in the remaining colleges of this group have no such direct responsibility. At the University of Chicago (30) the representatives elect from the faculty a small minority of the members of the two bodies which direct the internal work of the school. At Franklin and Marshall (31) and at Bryn Mawr (40) representation is upon a purely advisory

body. In the former this arrangement was the choice of the alumni, who felt that in this way their influence would be greater than if they nominated a few members of the Trustees. In both cases these advisory bodies discuss college problems with the President of the college. They have considered chiefly educational and social questions, and many important changes in college policy have originated in these conferences. In addition to its Conference Committee of Alumnæ, Bryn Mawr is about to establish alumnæ representation on the Board of Trustees. This tendency sooner or later to give alumni representatives full responsibility is indicated by the fact that there are to-day but four out of forty colleges where these representatives do not vote as overseers or as trustees.

The choice between representation on the board of trustees, or the creation of a board of overseers or of an alumni advisory body, is largely a question of adaptation to the conditions peculiar to each case. A purely advisory body will probably seldom be adopted as other than a temporary expedient. Where the board of trustees is small, efficient, and permanent in its membership, the establishment of a co-ordinate alumni body, such as the Board of Overseers of Harvard, would seem the ideal plan. By this means the small board of trustees is not diminished in efficiency by increase in numbers, the alumni representatives have greater freedom of discussion, being unhampered by much of the routine business which the trustees must discharge, and important actions of the trustees are subject to review by an entirely independent body representing a great variety of professional and business interests and points of view. If, however, the board of trustees is large, as is the Corporation of the Institute, it must, for rapid and efficient work, delegate the administrative detail to a small prudential or executive committee. The board of trustees itself then becomes a reviewing and confirming body, of which the alumni representatives may well be members; and the addition of a responsible board of overseers would make the government needlessly complicated and cumbersome, since every important action would have to receive the successive approval of three bodies,—the executive



committee, the trustees, and the overseers. Again, the terms of the college charter and the desire to avoid the necessity of amending it may largely affect the choice. Thus at the Institute, whereas representation on the Corporation was established by an amendment to the by-laws of that body, a board of overseers, unless with very limited powers, could probably not have been established under the existing charter.

In number the alumni representatives constitute a minority of the members of boards of trustees, but comprise the entire active membership of boards of overseers and of purely advisory bodies. The few exceptions are found where representatives are chosen for life (4, 21, 29). At the Institute 28 per cent. of the members of the Corporation will be alumni representatives. In but one-fourth of the colleges having short term alumni trustees is the proportion as great or greater.

The term of office of alumni representatives is usually three to six years. Compared with election for life, this short term has many advantages. The short term permits of bringing to the service of the college many more of the strongest of her sons. By the wider distribution of representatives which this greater number makes possible, many more of the alumni may be kept in touch with the college through a member of the government personally known to them. The short term makes representatives responsible to the alumni who elect them, in that they need not be returned unless they have served the college well. This makes them more truly alumni representatives, and furnishes an incentive for the alumni to watch their representatives' work. Finally, and not the least important, the short term involves regular and frequent balloting, itself an effective agency for keeping the alumni interest keen. In thirty-three out of forty colleges the representatives are chosen for short terms. Of the seven in which representatives are chosen for life, one reports that a large number of alumni participate in the voting, while six either do not report the number or report it to be very small. In two of these latter the plans of representation are now undergoing revision because of this lack of alumni interest.

Habitual re-election of representatives may, in part, neutralize the advantages of the short term; and in many colleges the tendency to such re-election is strong. To prevent the indefinite return of a willing candidate, without his formal rejection by the alumni or the trustees, many colleges make a representative ineligible for immediate re-election after two or three successive terms. At the Institute a representative may not be re-elected for at least one year after the expiration of his last term.

The alumni choice is usually effective as an election, whether it be actually an election or technically a nomination, only a single candidate being offered for each vacancy, with the understanding that the trustees will elect this candidate. Less frequently multiple candidates are offered, and the trustees may or may not agree to fill the vacancy from these candidates. The tendency, however, is strongly in favor of direct election by the alumni, or, if this is impracticable without change of charter, of requiring the alumni to present but one candidate for each vacancy. Thus, out of 35 colleges in which the alumni representatives are voting members of the overseers or of the trustees, the alumni ballot "nominates" multiple candidates in 8, single candidates in 10, and elects outright in 17. Considering nomination of a single candidate as equivalent to election, we have "nomination" in 8 colleges, and "election" in 27.

Where the alumni ballot merely nominates multiple candidates from among whom the trustees choose, it is always uncertain whether the first choice of the alumni will be confirmed. The knowledge that their choice might be in a measure nullified has in some cases seriously diminished the interest of the alumni and their participation in the voting. Of the colleges where this uncertainty exists, but six have had representation long enough for the taking of a second alumni vote. In two of the six, the vote continues large after many years. One reports a persistent decline in the number voting from 66 per cent. to 20 per cent. in the past five years, and in three the vote is very small.

In methods of conducting the alumni ballot, the greatest diversity prevails. While this is especially true of the methods of making

the preliminary nomination, these methods can, with few exceptions, be classified under two heads: nomination by the alumni at large and nomination by committee. Nomination by the alumni at large is the method most widely used. Usually, this is by a preliminary ballot, on which each elector suggests one or more candidates. Of the candidates suggested in this way, in some cases a prescribed number of those receiving the largest preliminary vote, in other cases all those receiving a prescribed number of votes, are placed on the final ballot.

Nomination by the alumni at large has given good results where the alumni organizations are alert and the mass of the alumni well informed. On this preliminary ballot the vote is, however, always scattering. Thus, at Yale, for a single vacancy as many as a thousand names have often been suggested in this way, from three to twelve of which have received the twenty-five votes necessary to place them on the final ballot. Elsewhere, not infrequently, only a single candidate or set of candidates has been nominated. In exceptional cases, no candidate has received the requisite number of votes (usually ten to twenty-five) and the nomination has failed. Bowdoin College (29) and Stevens Institute of Technology (41) have guarded against this contingency by requiring a committee to make the nominations, if nomination at large fails.

There are other disadvantages of nomination at large besides its uncertainty. It establishes no organization for investigating the fitness of candidates, whose choice is likely to be determined more by their personal popularity or their conspicuous position in public life than by any just appreciation of their probable usefulness as trustees. It provides no mechanism for informing the electors of the qualifications of the several candidates. As a consequence, the elector, knowing personally few or none of them, must often vote in the dark. It furnishes no means of regulating the geographical distribution of representatives, one or two active local organizations being able, in some instances, to monopolize the representation. As the preliminary vote is scattering, it permits a small clique, often as few as a dozen men, to secure the nomination of any one they choose.

The undoubted success in certain colleges of nomination at large is a tribute rather to the intelligent devotion and good sense of their alumni than to the method. In these colleges, groups of alumni take upon themselves the functions of nominating committees, seeking out good men and seeing to it that they receive the nomination. In a few cases, as at Yale, these groups go further, and conduct active campaigns on behalf of their candidates, circularizing the alumni with biographical sketches and lists of influential indorsers. While these methods have succeeded well in individual instances, they are obviously not always to be trusted.

Nomination by committee is the method adopted at Amherst (2), Dartmouth (7), Rutgers (20), Williams (25), Harvard (32), Tufts (33), the Institute (42), and at all of the colleges for women (34 to 39). Usually, it is left to the discretion of the committee to secure as representative a distribution of candidates, geographically and by classes, as is consistent with efficiency. Thus at Dartmouth it is the established custom to choose the candidates for successive years from different geographical districts. In several colleges, on the other hand, special machinery is provided to insure this distribution. At Mount Holyoke (35), Smith (37), and Vassar (38) each local alumnae society either suggests names to the central nominating committee or is formally represented on that committee; and at Williams (25) the committee, which reports the day after its appointment, is assisted, but not bound, by the suggestions of a nominating ballot taken the year before. Again, the committee's nominations may be subject to review before the final ballot is made up. At Harvard (32), at Radcliffe (36), and at Wellesley (39) the nominating committee merely suggests names on which a preliminary mail ballot is taken, there being provision in each case for independent nominations in connection with this preliminary ballot; and at the Institute the committee's list must be published three weeks before the closing of nominations, during which interval independent nominations may be filed. In each case these independent nominations are placed on the final ballot. Some such provision for independent nominations, after scrutiny of the committee's candidates, appears to meet the objections to nomination by committee.

The franchise is commonly limited to graduates: in exceptional cases, as at the Institute, non-graduates who have become members of the Alumni Association may vote. In a few cases, as a test of interest in the college, the payment of a fee is required. The frequent restriction of the franchise to graduates of one to five years' standing is designed to insure an electorate of greater maturity and broader outlook,—an electorate better able, incidentally, to see classes, factions, and fraternities in true perspective relative to the college. In those cases where personal ambition and fraternity and factional strife are reported to have marred the alumni balloting, not only was there no central body to sift candidates and to report upon their qualifications, but voting was permitted immediately after graduation. At Harvard, Yale, Tufts, and the Institute the interval between graduation and the acquisition of the franchise is five years.

More than by any restriction of the franchise, however, or any system of nomination, the continued choice of fit representatives is safeguarded by a large and intelligent vote. The most serious problem of alumni representation to-day is to secure a vote which shall represent the deliberate judgment, based upon adequate knowledge of the candidates, of the electorate as a whole. To vote intelligently, the elector must ascertain the qualifications of the several candidates among whom he is to choose. This, if the alumni body is large and widely scattered, he can seldom do, and, failing, he must vote blindly or not at all. To make available to each voter information which shall be both adequate and impartial is a difficult and delicate task; but, to insure a wise choice of representatives, this must, in some way, be done. In a number of colleges a brief biographical sketch, prepared by some central body, usually the nominating committee, is mailed to each voter with his ballot. This is done, among other colleges, at Harvard and at the Institute.

Alumni representation has been adopted not only at the request of alumni bodies, but often on the initiative of the trustees themselves. While in many cases an amendment to the college charter has been found desirable, more often representation has been estab-

lished by action of the trustees alone. Two difficulties are likely to arise: the charter may restrict to the trustees the power to elect their own successors and it may make the term of office of trustees for life. At Dartmouth (7) and at Rutgers (20) both of these difficulties have been met without modification of the charters, the first by inviting the alumni to "nominate" one candidate for each vacancy with the tacit understanding that the trustees will elect this nominee, the second by requiring each candidate, before his name is put upon the alumni ballot, to agree that, if elected, he will resign at the end of his term. In both cases these devices have served their purpose well.

While the plan of alumni representation in each case finally adopted will necessarily be a development to suit the conditions of that college, the experience of the past and the tendencies of the present point to a fairly definite type. The essential features of this type are: full responsibility imposed upon the alumni and upon their representatives; the certainty that the alumni choice will be effective; regular annual elections by mail ballot; representatives chosen for short terms; nominations made or guided by a responsible central body; and the voter supplied with such impartial information as will enable him to make an intelligent choice. Judged by this standard, the plan adopted by the Institute is, in its main lines, open to but one criticism: the alumni choice is not conclusive, since, of the five candidates annually chosen by ballot of the alumni, the Corporation must reject two. That a self-perpetuating board of trustees charged with large responsibilities should hesitate to delegate completely to the untried alumni a function so important as the choosing of one-third of its members is but natural. If the alumni choice is eventually to be made conclusive and this final selection by the Corporation waived, it must be shown that this precaution is unnecessary. It is for the alumni to prove that it is unnecessary by choosing only such candidates as are eminently fit.

LEONARD P. WOOD, '01.



ALUMNI REPRESENTATION IN COLLEGE GOVERNMENT.—COLLEGES FOR MEN AND FOR BOTH SEXES.

No.	THE INSTITUTION.		GOVERNING BODY.				FORMAL ALUMNI REPRESENTATION.					CONDUCT OF ALUMNI BALLOTING.					ALUMNI REPRESENTATIVES.		ELECTORS.		REMARKS.	
	Name. Control.	Year of Opening.	Name and Constitution.	No. of Mem- bers.	Term of Office.	No. Informal Alumni Members 1905.	Date of First Election.	No.	% of Whole Body.	Term of Office.	No. Elected and Frequency of Elections.	Alumni Ballot nomi- nates or elects.	Candidates proposed by.	Make-up of Official Ballot.	Information regarding Candidates sent out with Ballot.	Method of Voting.	Voting conducted by.	Qualifications.	Re-election.	Qualifications.		% of Electors Voting.
REPRESENTATION ON THE BOARD OF TRUSTEES.																						
1	ALBION COLLEGE, Albion, Mich.	1861 chartered as college (1843 as female seminary).	Board of Trustees: 1 <i>ex-officio</i> , President of College. 6 elected by Detroit Annual Conference. 6 elected by Michigan Annual Conference. 3 elected by Alumni (will ultimately be 6).	16	3 years. (Each Conference elects 2 annually.)	3, including President of college.	About 1880	3	19%	3 years.	1 each year.	Elects.	Annual Meeting of Alumni Association. No nominations made in advance of meeting.			In person at Annual Meeting Alumni Association or by mail; plurality elects. Mail vote scattering and ineffective.	Alumni Association.	Not prescribed; not necessarily graduates.	Unlimited.	Regular graduates of College of Liberal Arts of 3 years' standing.		Established by amendment to the Charter.
2	AMHERST COLLEGE, Amherst, Mass.	1821	Board of Trustees: 1 <i>ex-officio</i> , President of College. 11 elected by Board for . . . . . 5 elected by Alumni . . . . .	17	life. 5 years.	None.	1874	5	29%	5 years.	1 each year.	Elects.	By a nominating committee.	3 or more names for each vacancy (7 formerly required).	A committee reports on qualifications.	In person or by mail; not by proxy.	Alumni Association.	Board must consist of 7 clergymen and 10 laymen. Members of Faculty ineligible.	After 2 successive full terms ineligible for re-election for 5 years.	Graduates of 4 years' standing.	About 20%	Established by Act of Legislature which body delegated to the Alumni powers it had previously exercised. Regulations governing alumni balloting adopted by Alumni Association, and ratified by Legislature except as prescribed by Legislature. Changes in these regulations require joint action of Trustees and Alumni Association.
3	BOSTON UNIVERSITY, Boston, Mass.	1873, chartered 1869	Trustees of Boston University: Elected 6 annually for . . . . . 1 <i>ex-officio</i> , President of University.	30	5 years.					5 years.		The Alumni formerly nominated candidates for the Trustees. Since 1898 the Convocation (all graduates of the university) elects annually 1 representative to serve 4 years on each of the Visiting Committees of the following departments, namely: School of Theology, School of Law, School of Medicine, and the College of Liberal Arts. Whenever there is a vacancy in the representation on the Board of Trustees of any of these departments, the Trustees in all ordinary cases fill the same from the representatives of the Alumni on the Visiting Committee of that department. The alumni representatives constitute from one-fifth to one-half the membership of the Visiting Committees, the larger representation being in the professional schools.					Alumni representatives on the Visiting Committees must be graduates of the department which they are to visit of 7 years' standing, and must reside sufficiently near to be able to serve.					
4	BROWN UNIVERSITY, Providence, R.I.	1764	Corporation, self-perpetuating: 36 Trustees. 12 Fellows, including President. Trustees and Fellows commonly meet in same room at same time. Assent of both generally necessary.	48	Life.		1874			Life.		Nominates 3 for each vacancy in Trustees. Trustees not committed to elect.	By Alumni at large, 15 votes required.	All candidates of prescribed sects receiving 15 votes on preliminary ballot. Any other eligible may be voted for on final ballot.	No information has been furnished. Plan now under discussion for having a central committee investigate and report upon qualifications of candidates.	In person, by mail, or by proxy; 3 receiving highest vote chosen.	Alumni Association.	Board of Trustees required by Charter to consist of 22 Baptists, 5 Quakers, 4 Congregationalists, and 5 Episcopalians.	Election is for life.	Graduates of the university and members of the Associated Alumni.	Small.	Established by resolution of the Board of Trustees. Of the 65 Trustees elected since the establishment of alumni representation, 60 have been nominees of the Alumni, though not in all cases the first choice.
5	BUCKNELL UNIVERSITY, Lewisburg, Penn.	1846	Board of Trustees: Self-perpetuating.	25	Life.	3		7	28%	Life.	As vacancies occur.	Elects.	By Alumni at large. 2 preliminary mail ballots, the second limited to candidates receiving large vote on the first.	For each vacancy the 2 names receiving highest vote on second preliminary ballot.	No committee to investigate qualifications of candidates; no information furnished.	By mail; majority of votes necessary to elect.	Committee of 1 member each from Trustees and from Alumni Association.	Graduates of 5 years' standing.	Election is for life.	Graduates of the university.		Established by resolution of the Board of Trustees. Reported that alumni representation creates a lively interest among the Alumni.
6	CORNELL UNIVERSITY, Ithaca, N.Y.	1868	Board of Trustees: 8 <i>ex-officiis</i> , President and Librarian of university and 6 representing State of New York. 1 representing Cornell Estate . . . . . 20 elected by Board for . . . . . 10 elected by Alumni for . . . . .	39	Life. 5 years. 5 years.	8	1872	10	26% (33% of elected members).	5 years.	2 each year.	Elects.	By Alumni at large, 10 votes required.	All candidates receiving 10 votes on preliminary ballot. Any other eligible may be voted for.	No committee to investigate; no information furnished officially. Friends of candidates frequently send out information.	By mail; plurality elects. 4 of votes cast necessary to a choice.*	University.	Not prescribed; not necessarily Cornellians.		All persons holding a degree from Cornell in any department.	55% to 20% according as elections is or is not contested.	Established by amendment to the Charter. Details of alumni balloting prescribed by the alumni, subject to the approval of the Trustees. Reported that alumni trustees are doing much to protect alumni interest and to keep it alive.
7	DARTMOUTH COLLEGE, Hanover, N.H.	1769	Board of Trustees: Self-perpetuating. 1 <i>ex-officio</i> , Governor of New Hampshire. 7 elected by Board for . . . . . 5 nominated by Alumni. . . . .	13	life. 5 years.		1891	5	39%	5 years.	1 each year.	Nominates 1 for each vacancy with understanding that Trustees will elect.	By committee of 5, appointed by President Alumni Association, with approval of Annual Meeting.	5 names for each vacancy. In successive years candidates chosen from different geographical districts.	Information as to qualifications furnished by committee.	By mail; plurality necessary to a choice. Voting by proxy forbidden.	Alumni Association.	Not prescribed. Name of no candidate put on official ballot unless he has accepted A. A. constitution, and agreed to resign from Trustees at the end of his term.		Graduates of 3 years' standing of the college, Thayer School, or Chandler School. Recipients of honorary degrees may not vote.	41%	Established by resolution of Board of Trustees. Reported that the plan works admirably.

\* Failing the required percentage of votes, the Alumni present at Annual Meeting vote on the 2 highest candidates for each vacancy.



ALUMNI REPRESENTATION IN COLLEGE GOVERNMENT.—COLLEGES FOR MEN AND FOR BOTH SEXES.

THE INSTITUTION.			GOVERNING BODY.				FORMAL ALUMNI REPRESENTATION.				CONDUCT OF ALUMNI BALLOTING.						ALUMNI REPRESENTATIVES.		ELECTORS.		REMARKS.			
No.	Name. Control.	Year of Opening.	Name and Constitution.	No. of Mem- bers.	Term of Office.	No. Informal Alumni Members 1905.	Date of First Election.	No.	% of Whole Body.	Term of Office.	No. Elected and Frequency of Elections.	Alumni Ballot nomi- nates or elects.	Candidates proposed by.	Make-up of Official Ballot.	Information regarding Candidates sent out with Ballot.	Method of Voting.	Voting conducted by.	Qualifications.	Re-election.	Qualifications.		% of Electors Voting.		
REPRESENTATION ON THE BOARD OF TRUSTEES.—Continued.																								
17	PENNSYLVANIA STATE COLLEGE, State Col- lege, Penn.	1859	Board of Trustees: 5 <i>ex-officiis</i> , President of college and State offi- cers. 6 appointed by Gover- nor of Pennsylvania. 12 representing agricul- tural and manufactur- ing interests, etc. 9 elected by Alumni.	32	3 years.	1	About 1875	9 3 prior to 1905.	28%	3 years.	3 each year.	Elects.	By Alumni at large, 25 votes required.	As many candidates as receive 25 votes on preliminary ballot. Any other eligible may be voted for.		In person or by mail; plurality elects. A tie is resolved by ballot of Trustees.	Trustees.	Same as of electors, ex- cept that members of Faculties and Boards of Trustees of any other college or university in Pennsylvania are ineli- gible.	Unlimited.		Holders of the B.A. degree of 3 years' standing, and recipients of all advanced and honorary degrees.		Established by State Legislature. Regulations governing alumni elec- tion of Trustees made by the Legis- lature, but alterable by the Board of Trustees. Alumni representation on the Trustees increased from 13% to 28% and voting by mail estab- lished in 1905.	
18	UNIVERSITY OF PENN- SYLVANIA, Philadel- phia, Penn.	1740	Board of Trustees: Self-perpetuating. 1 <i>ex-officio</i> , Governor of Pennsylvania, who is president <i>ex-officio</i> of Board. 10 elected by Board. 5 nominated by Alumni.	25	Life.	"It is the wish to have as many as possible."	1882 (Central Committee elected.)	5 in 1898.	Ultimately 33%.	Life.	On the oc- currence of every 3d vacancy.	The "Central Committee of the Alumni" nominates 4 candidates for every 3d vacancy in the Trustees: if all are rejected, the process is repeated until vacancy is filled. The Central Committee consists of 30 members, 6 elected annually by Alumni for 5 years. Members of Central Committee 1/4 each graduates of College of 3 years' standing, graduates Medical and Allied Departments, and graduates Law Department. The Central Com- mittee nominates its own successors, 3 for each vacancy: a preliminary mail ballot by all qualified Alumni reduces this to 2 candidates for each vacancy. The final election is by ballot cast in person. Plurality of votes elects. The Central Committee conducts the election of its own successors. The Alumni do not directly vote for Trustees.							Qualifications of alumni Trustees not stated. Officers of government or instruction and mem- bers of the Board of Trustees are ineligible to membership in the Central Committee.	Election of Trustees is for life.		Holders of any degree of the University of Penn- sylvania, honorary or otherwise, except mem- bers of the Board of Trustees and the officers of government or in- struction, may vote for members of the Central Committee.	About 4% on first ballot.	Established by resolutions of the Board of Trustees. Regulations governing election to Central Com- mittee established by the Committee, subject to the approval of the Trust- ees. The Central Committee ap- points from its members Visiting Committees, considers their reports, and may transmit them to the Trust- ees. Method reported reasonably satisfactory.
19	PRINCETON UNIVERSITY, Princeton, N.J.	1746	Board of Trustees: 2 <i>ex-officiis</i> , President of University and Gover- nor of New Jersey. 25 elected by Board for . . . . . 5 elected by Alumni for . . . . .	32	Life. 5 years.		1901	5	16%	5 years.	1 each year.	Elects.	By Alumni at large, 20 votes required.	As many candidates as receive 20 votes on the preliminary ballot.	No committee to inves- tigate qualifications of candidates. No in- formation furnished except candidate's ad- dress and number of votes for him on pre- liminary ballot.	In person or by mail; voting by proxy prohibited. Tie re- solved by lot.	Committee consisting of Secretary Alumni Association and 1 member each of Trustees and Fac- ulty.	Graduates of 10 years' standing.	Unlimited.		Graduates of 3 years' standing who have paid to Secretary of Alumni Trustees an enrolment fee of \$1. Franchise lost by failure to vote for 5 consecutive years. Reinstatement on pay- ment of another fee.	In con- tested elec- tions 25% to 30% on final bal- lot; about 1/2 as many on prelimi- nary ballot.	Suggested by Alumni. Established by amendments to Charter and to By-laws of Trustees. Detailed plan worked out by Alumni and in- corporated in By-laws of Trustees. Reported to be satisfactory to Trust- ees and Alumni.	
20	RUTGERS COLLEGE, New Brunswick, N.J.	1770	Board of Trustees: Self-perpetuating. 4 <i>ex-officiis</i> , State offi- cers. 32, including President of College, elected by Board for . . . . . 5 nominated by Alumni . . . . .	41	Life. 5 years.		1883	5	12%	5 years.	1 each year.	Nominates 1 for each vacancy.	By committee of 3 elect- ed at Annual Meeting Alumni Association.	2 names for each va- cancy. No provision for independent nomi- nations.		In person or by mail; not by proxy. Sec- ret ballot; plu- rality elects. Tie resolved by lot.	Alumni Association.	Graduates not members of the Faculty. Candi- dates must agree to re- sign from Trustees at the end of their terms.	After 2 successive terms ineligible for 5 years.		Graduates of 4 years' standing not in arrears to Alumni Association. Graduates of other col- leges recipients of ad- vanced degrees from Rutgers, and recipients of honorary degrees may not vote.	Very small.	Regulations governing alumni bal- loting originated with Alumni Asso- ciation, and may be amended by Alumni Association, subject to ap- proval of Trustees. Reported to be "entirely satisfactory and to furnish large number of most excellent Trustees."	
21	UNIVERSITY OF TEN- NESSEE, Knoxville, Tenn.	1704	Board of Trustees: Self-perpetuating.	30	Life or during residence in the State.		1898	It is intended that Alumni shall present nomina- tions for all future va- cancies.		Life or during residence in the State.	When list is exhausted.	Nominates; Trustees do not pledge to elect. List of 23 candidates nominated in 1898, 5 from 1 Congressional District, 2 from each of 9 other Districts.				A majority of votes cast necessary to a choice.			Members of Alumni As- sociation not in arrears; non-graduates eligible to membership in Alumni Association.		Very small.	Established by resolution of Trustees. Regulations governing alumni bal- loting prescribed by Alumni Asso- ciation, and do not require ratifica- tion by Trustees. But one alumni election has been held.		
22	TRINITY COLLEGE, Hartford, Conn.	1824	Board of Trustees: 1 <i>ex-officio</i> , President of College. 20 elected by Board for . . . . . 3 elected by Alumni for . . . . .	24	Life. 3 years.		1883	3	13%	3 years.	1 each year.	Elects.	By Alumni at large, 7 votes required.	As many candidates as receive 7 votes on pre- liminary ballot.	No committee to inves- tigate qualifications of candidates; no infor- mation furnished.	By mail; plurality elects. Tie re- solved by lot.	Board of Trustees.	Graduates of 5 years' standing; officers of in- struction in the College ineligible.	Eligible for re-elec- tion.		Graduates of 1 year's standing.	53% on final ballot; 23% to 25% on preliminary ballot.	Established by resolution of State Legislature, subject to confirmation by Board of Trustees. In addition to election of Trustees, the Alumni nominate 6 of the 12 Fellows. The Fellows are the "official Examiners" (i.e., the Visitors) of the college.	
23	UNIVERSITY OF VER- MONT, Burlington, Vt.	1800	Board of Trustees: 2 <i>ex-officio</i> , President of University and Gover- nor of State. 9 elected by Board for . . . . . 9 elected by Legislature, 3 every 2d year for . . . . .	20	Life. 6 years.	8 life members are Alumni.	1880			Life.	On occur- rence of every 2d vacancy in life members.	Nominates 3 for each vacancy.			No committee to inves- tigate qualifications of candidates; no infor- mation furnished.	By mail, not by proxy. Not a secret ballot; plurality elects.	Alumni Association.	Not prescribed.	Election is for life.	Graduates of 3 years' standing.	Very small.	"Established by agreement between the Trustees and the Alumni." Com- mittee now at work devising new plan.		

ALUMNI REPRESENTATION IN COLLEGE GOVERNMENT—COLLEGES FOR MEN AND FOR BOTH SEXES.

No.	THE INSTITUTION.		GOVERNING BODY.				FORMAL ALUMNI REPRESENTATION.				CONDUCT OF ALUMNI BALLOTING.						ALUMNI REPRESENTATIVES.		ELECTORS.		REMARKS.				
	Name. Control.	Year of Opening.	Name and Constitution.	No. of Mem- bers.	Term of Office.	No. Informal Alumni Members 1905.	Date of First Election.	No.	% of Whole Body.	Term of Office.	No. Elected and Frequency of Elections.	Alumni Ballot nomi- nates or elects.	Candidates proposed by.	Make-up of Official Ballot.	Information regarding Candidates sent out with Ballot.	Method of Voting.	Voting conducted by.	Qualifications.	Re-election.	Qualifications.		% of Electors Voting.			
REPRESENTATION ON A SEPARATE BODY.																									
29	BOWDOIN COLLEGE, Brunswick, Me.	1802	Board of Trustees: Self-perpetuating, elec- tions ratified by Over- seers. Overseers: Self-perpetuating. Not to exceed $\frac{1}{2}$ of Overseers nominated by Alumni.	13  45	Life.  Life.	All of Trustees are Alumni.	1870	19 Overseers in 1905.	Not to exceed $\frac{1}{2}$ of Overseers.	Life.		Nominates 4 for every 2d vacancy in Over- seers.	By Alumni at large, 25 votes required. In de- fault of such nomina- tions, by Committee of 5 (President and Sec- retary of A. A. mem- bers <i>ex-officiis</i> ) elected at Annual Meeting Alumni Association.	As many as receive 25 votes on preliminary ballot. Names ar- ranged in order of number of votes re- ceived.	No committee to inves- tigate qualifications of candidates. Informa- tion furnished: class, residence, and occupa- tion.	By mail, not by proxy; plurality elects. Se- cret ballot.	Alumni Association.	Not prescribed.	Election is for life.	Graduates. Originally limited to grad- uates of 3 years stand- ing, exclusive of medical graduates and recipients of honorary degrees.	About $\frac{1}{2}$ .	Established by amendment to By- laws of the Trustees. Reported entirely satisfactory to government and Alumni.			
30	UNIVERSITY OF CHICAGO, Chicago, Ill.	1892	Board of Trustees.	21	3 years.			The University Senate consists of officers of the university, the heads of departments, and 3 members of the Faculty elected annually by the alumni members of the Congregation and serving 1 year. The Senate considers questions of educational work and policy. The University Council consists of officers of the university, Deans of the university and affiliated schools, Directors of University Extension, libraries, laboratories, museums, University Press, University Affiliations, Co-operating Work, and Physical Culture, and 3 members of the Faculty elected annually by the alumni members of the Congregation and serving 1 year. The Council considers questions of administration. The University Congregation consists of: first, officers of administration and instruction of the rank of Instructor and above; second, Doctors of Philosophy of the University of Chicago; third, representatives of the Alumni elected by the several Alumni Associations for a term of 10 years, as follows: (a) Bachelors of Divinity of 3 years' standing, not more than 5 annually; (b) Masters of Arts, Philosophy, and Science of 5 years' standing, not more than 5 annually; (c) Bachelors of Arts, Philosophy, and Science of 10 years' standing, not more than 10 annually; fourth, officers of Affiliated Colleges elected by the Congregation; fifth, honorary members recommended by the Senate and elected by the Congregation, not more than 5 annually. One member of the Senate and 1 member of the Council is elected annually by each of the 3 following groups of members of the Congregation: (a) Doctors of Philosophy and representatives of the Graduate Alumni; (b) representatives of the Divinity Alumni; (c) representatives of the Collegiate Alumni.																	
31	FRANKLIN AND MAR- SHALL COLLEGE, Lan- caster, Penn.	1836	Board of Trustees: 12 elected by Eastern Synod. 6 elected by Potomac Synod. 3 elected by Pittsburg Synod. 9 elected by the Board. Advisory Council of Alum- ni. . . . . 1 <i>ex-officio</i> , President of College. 9 elected by Alumni for	30      10	10 years.      3 years.	About $\frac{1}{2}$ of the Trustees.	1900	9 members Advisory Council.		3 years.	3 each year.	Elects all members of Advisory Council (ex- cept President of col- lege <i>ex-officio</i> ).	By Alumni at large, by preliminary mail bal- lot.	For 3 vacancies the 6 candidates receiving largest vote on prelimi- nary ballot.		By mail.	Alumni Association.	Graduates not officers of government or instruc- tion, or members of the Board of Trustees.	Unlimited.	Graduates not in arrears to Alumni Association.	14% to 18% on final bal- lot.	Authorized by Trustees and Alumni Association. The Board of Trus- tees meets but once a year			
32	HARVARD UNIVERSITY, Cambridge, Mass.	1638	Corporation (President and Fellows) elect their own successors, sub- ject to consent of Overseers. Board of Overseers: 2 <i>ex-officio</i> , President and Treasurer of Uni- versity. 30 elected by Alumni for	7  32	Life.  6 years.	All members of Corpora- tion are Alumni.*	1866	30		6 years.	5 each year.	Elects.	By a standing commit- tee of 9, 3 appointed annually, for 3 years, by President of A. A. with approval of Di- rectors of A. A. This committee suggests candidates and sends out ballots for a pre- liminary mail vote, each Alumnus voting for 5.	2 names for each va- cancy, being those re- ceiving largest vote on preliminary ballot; also candidates nomi- nated by certificate signed by 100 electors.	With preliminary bal- lot only; degrees taken, occupation, political office, public services, books written, etc. Information compiled by Committee on Nominations.	Final ballot in per- son; Australian bal- lot. 5 receiving highest vote are elected.	Committee of Over- seers conducts final ballot and counts preliminary ballot. Committee of A. A. sends out prelimi- nary ballot.	Not defined, not limited to graduates of the uni- versity nor residents of the State. Officers of government or instruc- tion ineligible.	Unlimited after 1 interval, following either 1st or 2d term.	B.A. of 5 years' standing, M.A., and recipients of honorary degrees. Fran- chise likely to be ex- tended in near future to graduates of the profes- sional schools.	On final bal- lot 31% in 1905. Aver- age slightly less. Per- centage much higher on prelimi- nary ballot.	Established by Act of Legislature 1865, which body delegated to the Alumni powers of election it had itself pre- viously exercised.			
33	TUFTS COLLEGE, Tufts College, Mass.	1854	Board of Trustees: Self-perpetuating. Board of Overseers: 1 <i>ex-officio</i> , President of College. 16 elected by Alumni for	26  17	Life.  4 years.	12 of the Trustees.	1899	16 members of Overseers		4 years.	4 each year.	Elects all members of Overseers (except Pres- ident of college <i>ex-officio</i> ).	By Executive Commit- tee A. A., consisting of President, 2 Vice-Pres- idents, Secretary, Treasurer, and 7 Di- rectors. This com- mittee elected annu- ally by A. A.	2 names for each va- cancy. Any eligible may be voted for.	No committee to inves- tigate qualifications of candidates; no infor- mation furnished.	By mail; plurality elects. Australian ballot.	Board of Overseers.	Graduates of 10 years' standing; at least 12 must hold degrees of A.B., S.B., or Ph.D. Officers of instruction in- eligible. Not to exceed 4 may be Trustees.	Eligible for not more than 2 successive full terms.	Graduates of 5 years' standing and recipients of honorary degrees.	35%.	Established by Board of Trustees. Except for occasional complaint that Overseers are chosen from too re- stricted a territory, reported satis- factory to all.			

\* See footnote page 302.



ALUMNI REPRESENTATION IN COLLEGE GOVERNMENT.—COLLEGES FOR MEN AND FOR BOTH SEXES.

No.	THE INSTITUTION.		GOVERNING BODY.				FORMAL ALUMNI REPRESENTATION.				CONDUCT OF ALUMNI BALLOTING.						ALUMNI REPRESENTATIVES.		ELECTORS.		REMARKS.		
	Name. Control.	Year of Opening.	Name and Constitution.	No. of Mem- bers.	Term of Office.	No. Informal Alumni Members 1905.	Date of First Election.	No.	% of Whole Body.	Term of Office.	No. Elected and Frequency of Elections.	Alumni Ballot nomi- nates or elects.	Candidates proposed by.	Make-up of Official Ballot.	Information Candidates with Ballot.	regarding sent out	Method of Voting.	Voting conducted by.	Qualifications.	Re-election.		Qualifications.	% of Electors Voting.
REPRESENTATION ON THE BOARD OF TRUSTEES.—Continued.																							
8	DICKINSON COLLEGE, Carlisle, Penn.	1783	Board of Trustees: 1 <i>ex-officio</i> , President of College. 43 elected by Board. 4 elected by Alumni.	48	4 years.	18	About 1892	4	9%	4 years.	When term expires; not necessary 1 each year	Elects.	By Annual Meeting of District Alumni As- sociations. Alumni di- vided into 4 geograph- ical districts. Each District Association makes its own regula- tions and elects 1 of its own members to represent it.		No commit- tee to inves- tigate qualifica- tions of candidates.		In person; no voting by mail or by proxy.	Alumni Association.	Graduates in good stand- ing in the district which they represent.	Unlimited.	Graduates and recipients of honorary degrees.		Established by amendment to Char- ter. Each District Association makes its own regulations governing elec- tions. Reported that alumni mem- bers of the Trustees have been found of great value, and that "we are quite content with our arrange- ment."
9	Methodist Episcopal. DRAKE UNIVERSITY, Des Moines, Ia.	1881	Board of Trustees: 12 elected by Church of Christ, 4 each year. 6 elected by Board, 2 each year. 6 elected by Alumni, 2 each year.	24	3 years.		1882	6	25%	3 years.	2 each year.	Elects.	By Alumni at large by preliminary mail bal- lot.	"Those receiving ma- jority vote (on prelimi- nary ballot) placed on final ballot."	No committee to inves- tigate qualifica- tions of candidates; no infor- mation furnished.		By mail, secret bal- lot; plurality elects.	Committee of Alumni appointed by Board of Trustees.	Not prescribed.		Graduates of any of the colleges of the univer- sity.	20% on both preliminary and final ballot.	Reported that "the plan of having 4 of the Trustees elected by the Alumni is very satisfactory."
10	Christian. INDIANA UNIVERSITY, Bloomington, Ind.	1824	Board of Trustees: 5 elected by State Board of Education. 3 elected by Alumni.	8	3 years.		1891	3	38%	3 years.	1 each year.	Elects.	By Alumni at large, 10 votes required.	All candidates receiving 10 votes on prelimi- nary ballot.	No committee to inves- tigate qualifica- tions; no information fur- nished.		In person or by mail; plurality elects. 50% of votes cast necessary to a choice.*	University.	Not prescribed.	Unlimited.	Alumni resident in Indi- ana holding degrees A.B., B.L., B.S., B.Ph., LL.B., A.M., M.S., Ph.D.	Small, if there is no contest.	Established by Act of Legislature. Reported that "plan is satisfactory to all."
11	State. IOWA COLLEGE, Grinnell, Ia.	1848	Board of Trustees: 24 elected by Board for. . . . . 3 elected by Alumni. . . . .	27	life. 3 years.	Several.		3	11%	3 years.	1 each year.	Elects.	By Alumni at large. Each elector may vote for but one.	For each vacancy the 5 candidates receiving largest vote on prelimi- nary ballot.	Information regarding each candidate fur- nished by Board of Election, consisting of Sec'y A. A. and 2 others elected at An- nual Meeting A. A.		In person or by mail; plurality elects. Tie resolved by vote of Annual Meeting Alumni Association.	Alumni Association.	Not prescribed, except that members of the Faculty are ineligible.	After 3 successive terms ineligible for re-election for 1 year.	Graduates of 1 year's standing who have paid their annual dues to the Alumni Association.	One-third.	
12	Congregational. LAFAYETTE COLLEGE, Easton, Penn.	1832	Board of Trustees: Self-perpetuating. 10 elected by Board for. . . . . 6 nominated by Alumni (Limit of membership of Trustees, 35.)	25	life. 6 years.	"Of the 25 Trustees, 20 are Alumni."	1890	6	24%	6 years.	2 every second year.	Nominates 1 for each vacancy; formerly nominated 2 for each vacancy.	By Alumni at large, 10 votes required. Each elector votes for but 1 for each vacancy.	All candidates receiving 10 votes on prelimi- nary ballot, usually from 7 to 20 for the 2 vacancies.	Executive Committee Alumni Association inves- tigates and reports on qualifications of candidates.		By mail.	Alumni Association.	Members of the Alumni Association who are graduates of 15 years' standing.	Unlimited after 1 in- terval of 2 years.	Members of the Alumni Association whose classes have been grad- uated 3 years, and who were students at the college at least 2 years.	10% to 15% on both pre- liminary and final ballot.	Established by amendment to the By-laws of the Trustees.
13	Presbyterian. LEHIGH UNIVERSITY, South Bethlehem, Penn.	1866	Board of Trustees: Self-perpetuating. Honorary Trustees: 4 nominated by Alumni	10	life. 4 years.	4	1876	4	22%	4 years.	1 each year.	Nominates.	By Alumni at large.	All names proposed ap- pear on the ballot, generally 2 or 3.	No committee to inves- tigate; no information furnished.		In person or by mail; not by proxy. Bal- lots are signed by voter.	Alumni Associa- tion.	Graduate members of Alumni Association not on teaching staff.	Unlimited.	Graduates whose annual dues to the Alumni As- sociation are paid.	30%	Established by resolution of the Trus- tees. Balloting for alumni Trus- tees simultaneous with balloting for officers of Alumni Association. Re- ported that the method is entirely satisfactory.
14	Non-sectarian. OBERLIN COLLEGE, Oberlin, Ohio.	1833	Board of Trustees: 18 elected by Board. 6 elected by Alumni.	24	6 years.	13	1870; until 1892 alumni members without vote.	6	25%	6 years.	1 each year.	Elects.	By Alumni at large.	5 receiving largest vote on preliminary ballot.	No committee to inves- tigate qualifica- tions of candidates. Year of graduation, occupa- tion, and residence stated on ballot.		By mail; plurality elects.	College.	Graduates not members of the teaching staff.	Unlimited.	Graduates immediately after graduation, includ- ing recipients of honor- ary degrees.	50% to 60% on final ballot. 25% to 35% on prelimi- nary ballot.	In present form established by Act of Legislature amending the College Charter. Initiated tentatively under amendments to the By-laws of the Trustees. Existing system reported satisfactory.
15	Non-sectarian. OHIO WESLEYAN UNIVER- SITY, Delaware, Ohio.	1844	Board of Trustees: 1 <i>ex-officio</i> , President of University. 25 Elected by Annual Conferences of M. E. Church. 3 (may be increased to 5) elected by Board. 5 elected by Alumni.	34	5 years.	About 50%.	About 1870	5	15%	5 years.	1 each year.	Elects.	By Annual Meeting Alumni Association nominations are made for the election of the following year.	3 names for each va- cancy. Any other eli- gible may be voted for.			By mail.	Alumni Association.	Graduates of 3 years' standing.	Unlimited.	Graduates of 3 years' standing.		Established by amendment to By- laws of the Trustees. Reported fairly satisfactory.
16	Methodist Episcopal. PENNSYLVANIA COLLEGE, Gettysburg, Penn.	1832	Board of Trustees: Self-perpetuating. 6 nominated by Alumni.	32	Life.	About 50%.	1887.	6	19%	Life.	As vacan- cies in the 6 occur.	Nominates 1 for each vacancy. Trustees have never refused to elect.	By Annual Meeting Alumni Association candidates are nomi- nated for immediate election.	1 or 2 candidates for each vacancy.			In person at Annual Meeting Alumni As- sociation.	Alumni Association.	Graduates of 10 years' standing.		Alumni.		Established by Trustees on petition of Alumni Association.
	Lutheran.																						

\*Failing the required percentage of votes, the Alumni present at Annual Meeting vote on the 2 highest candidates for each vacancy.



# INFORMAL ALUMNI PARTICIPATION IN COLLEGE GOVERNMENT.

THE INSTITUTION.		GOVERNING BODY.				No.	THE INSTITUTION.		GOVERNING BODY.				No.	THE INSTITUTION.		GOVERNING BODY.			
Name. Control.	Year of Opening.	Name and Constitution.	No. of Members	Term of Office.	Number Alumni Members 1905.		Name. Control.	Year of Opening.	Name and Constitution.	No. of Members.	Term of Office.	Number Alumni Members 1905.		Name. Control.	Year of Opening.	Name and Constitution.	No. of Members.	Term of Office.	Number Alumni Members 1905.
41 UNIVERSITY OF CALIFORNIA, Berkeley, Cal.	1869	Board of Regents: 7 <i>ex-officio</i> , President of the University, President of the Mechanics' Institute, and 5 representing the State 16 appointed by Governor	23	14 years.	5 and Governor.	51	STATE UNIVERSITY OF IOWA, Iowa City, Ia.	1847	Board of Regents: 2 <i>ex-officio</i> , Governor of State and Superintendent of Public Instruction. 11 elected by Legislature. 1 from each Congressional District, all not to be of same party. $\frac{1}{3}$ (as nearly as may be) elected every 2d year.	13	6 years.	9	59	OHIO STATE UNIVERSITY, Columbus, Ohio.	1873	Board of Trustees: Appointed by Governor, usually 1 annually.	9	7 years.	1
State.							State.							State.					
44 CASE SCHOOL OF APPLIED SCIENCE, Cleveland, Ohio.	1881	Corporation (which meets but once each year): Self-perpetuating. Board of Trustees, 1 elected annually by Corporation.	21 7	Life. 7 years.	2 members of Corporation.	52	MICHIGAN STATE AGRICULTURAL COLLEGE, Agricultural College P.O., Mich. State.	1857	Michigan State Board of Agriculture: 2 <i>ex-officio</i> , Governor of State and President of College. 7 appointed by Governor, confirmed by State Senate.	9	6 years.	3 and Governor.	60	RENSSELAER POLYTECHNIC INSTITUTE, Troy, N.Y.	1824	Board of Trustees: Self-perpetuating. Prudential Committee of 3, composed entirely of Alumni.	23	Life.	13
45 UNIVERSITY OF CINCINNATI, Cincinnati, Ohio.	1874	Board of Directors: 3 appointed every second year by Mayor.	9	6 years.	4	53	UNIVERSITY OF MICHIGAN, Ann Arbor, Mich. State.	1837	Board of Regents: 2 <i>ex-officio</i> , President of University and Superintendent of Public Instruction. 8 elected by people of the State.	10	8 years.	4	61	UNIVERSITY OF TEXAS, Austin, Texas. State.	1883	Board of Regents: Appointed by Governor, with advice and consent of the Senate.	8	2 years.	1
46 COLUMBIA UNIVERSITY IN THE CITY OF NEW YORK, New York, N.Y. Non-sectarian.	1754	Trustees of Columbia College: Self-perpetuating.	24	Life.	6	54	UNIVERSITY OF MINNESOTA, Minneapolis, Minn. State.	1867	Board of Regents: 3 <i>ex-officio</i> , President of University, Governor of State, and Superintendent of Public Instruction. 9 appointed by Governor, confirmed by Senate.	12	6 years.	1	62	TULANE UNIVERSITY OF LOUISIANA, New Orleans, La. Non-sectarian.	1834	Board of Administrators: 3 <i>ex-officio</i> , Governor of State, Mayor of New Orleans, and Superintendent of Public Instruction. 17 self-perpetuating.	20	Life.	7
47 COLLEGE OF LIBERAL ARTS, UNIVERSITY OF DENVER, University Park, Col. Methodist Episcopal.	1864	Board of Trustees: Appointed 7 annually by the Annual Conference of the Methodist Episcopal Church.	28	4 years.	About 20%	55	UNIVERSITY OF MISSOURI, Columbia, Mo. State.	1841	Board of Curators: Appointed by Governor, confirmed by Senate; 1 from each Congressional District, 3 appointed every 2 years.	9	6 years.	2 or more always.	63	UNIVERSITY OF VIRGINIA, Charlottesville, Va. State.	1825	Board of Visitors: Appointed by Governor. 5 appointed in 1902, 4 in 1904.	9	4 years.	Nearly all members of Board.
48 GEORGE WASHINGTON UNIVERSITY (formerly Columbian University), Washington, D.C. Baptist.	1821	Board of Trustees: Self-perpetuating. 1 <i>ex-officio</i> , President of University. 21, elected 7 annually.	22	3 years.	$\frac{1}{3}$	56	COLLEGE OF THE CITY OF NEW YORK, New York, N.Y. City.	1849	Board of Trustees: 2 <i>ex-officio</i> , President of College and President of Board of Education of the City of New York. 9 appointed by Mayor, 1 annually for	11	9 years.	About $\frac{1}{2}$	64	WASHINGTON UNIVERSITY, St. Louis, Mo. Non-sectarian.	1859	Board of Directors: Self-perpetuating.	17	Life.	3
49 UNIVERSITY OF ILLINOIS, Urbana, Ill. State.	1868	Board of Trustees: 3 <i>ex-officio</i> , Governor of State, Superintendent Public Instruction, and President State Board of Agriculture. 9 elected by people of State, 3 every 2d year	12	6 years.	2 Tacitly admitted that 1 in 3 should be an Alumnus.	57	NEW YORK UNIVERSITY, University Heights, N.Y. Non-sectarian.	1831	Corporation, or Council of the University: Self-perpetuating. $\frac{1}{3}$ elected each year.	32	4 years.	$\frac{1}{2}$	65	WESTERN RESERVE UNIVERSITY, Cleveland, Ohio. Non-sectarian.	1826	Board of Trustees: Self-perpetuating.	24	25 years; habitual re-election.	3 or 4
50 IOWA STATE COLLEGE OF AGRICULTURE AND MECHANIC ARTS, Ames, Ia. State.	1868	Board of Trustees: 2 <i>ex-officio</i> , Governor of State and Superintendent Public Instruction. 11 elected by Legislature 1 from each Congressional District, all not to be of same party. $\frac{1}{3}$ (as nearly as may be) elected every 2d year.	13	6 years.	4	58	NORTHWESTERN UNIVERSITY, Evanston, Ill. Methodist Episcopal.	1855	Board of Trustees: $\frac{1}{3}$ elected annually.	40	4 years.	4 or more.	66	UNIVERSITY OF WISCONSIN, Madison, Wis. State.	1850	Board of Regents: 2 <i>ex-officio</i> , President of University and State Superintendent of Public Instruction. 13 appointed by Governor, 1 from each Congressional District, 2 from State at large	15	3 years.	More than $\frac{1}{2}$

## GENERAL INSTITUTE NEWS.

## CORPORATION NOTES

The regular meeting of the Corporation on June 1 was distinguished by the first appearance of the term members elected at the meeting in March. All the new members were present excepting Mr. Locke, who was absent in California because of ill-health. Pleasant features of the day were a luncheon given to the term members and the Executive Committee of the Corporation, at the University Club, by President Morss of the M. I. T. Alumni Association, and a reception given by President Pritchett and Mr. Charles A. Stone, at Mr. Stone's house on Beacon Street, in the evening. To the latter were invited all the members of the Corporation and Faculty of the Institute.

At the meeting of the Corporation the candidates for degrees of Masters of Science and Bachelors of Science, as presented by the Faculty, were formally awarded degrees. The list is given on page 332. Various reports of visiting committees were presented and placed on file. The resignations of Mr. Thornton K. Lothrop as a member of the Corporation and of Mr. Howard Stockton as a member of the Executive Committee were accepted with expressions of regret. A number of promotions within and appointments to the instructing staff, reported from the Executive Committee and noted on page 314, were confirmed.

The President pointed out that the question whether the Institute should remain in its present location by the purchase of additional land or should remove to a quieter part of the city where it could acquire a larger tract of land must be settled at an early date. It was therefore voted that the problem be referred to a special committee made up of the Executive Committee, of five other members of the Corporation to be appointed by the President, of the chairman of the Faculty, and of the president of the Alumni Association, to report in detail to the Corporation at its meeting in Oc-



tober. The President subsequently appointed upon this committee Messrs. Jackson, Felton, Cabot, Munroe, and Main.

#### FACULTY NOTES

At the annual meeting of the Faculty, May 2, Professors Tyler and Burton were re-elected Secretary and Dean, respectively. There were no important changes in the list of standing committees.

A significant and important step has been taken by the Faculty in acting favorably on Professor Swain's recommendation for the reduction of the present modern language requirement in Course I. and Course XI. from two years to one. This has enabled him to transfer Applied Mechanics to an earlier period in the course, extending from the middle of the second year to the middle of the third. Additional time is also devoted to a number of professional studies, while the assignment for English and History in the second year is materially in excess of that in other courses. A committee has been appointed to consider and report on the general question of the allotment of time which may be released by future reduction of the present Modern Language requirements in any course.

The list of general options in the third year has been increased by the addition of courses in American Literature: National Ideals, and on the Bible as Literature.

An interesting conference with teachers from secondary schools was held by members of the Faculty, at the Technology Club, on Saturday, May 19. There was an extended discussion of results of recent entrance examinations, particularly in mathematics, and of various matters in connection with the administration of entrance examinations.

A valuable exhibit of the Institute's work in Biological and Sanitary lines has been made, under the direction of Professors Sedgwick and Winslow, at the recent meetings of the American Medical Association and the American Waterworks Association.

Professors Burton and Peabody attended the recent jubilee meeting of the great Society of German Engineers at Berlin, and report a most interesting occasion. Professor Burton was the official

delegate of the Institute to the celebration. The following informal letter to Dr. Pritchett is of interest:—

BERLIN, GERMANY, Thursday, June 14, 1906.

*Dear President Pritchett,*—I arrived in Berlin Sunday, June 10. On Monday I presented my credentials, and was introduced to the principal officials, who were all most cordial, and seemed to know all about the Institute. Monday evening, at the banquet, I was seated between the Rector of the Charlottenburg school and the delegate from Glasgow University. Opposite me was the French delegate from the Schools of Mines in Paris. My German conversational abilities are very limited; but all spoke English near me, excepting the Frenchman, and I had occasion to help him out, for he understood neither German nor English. Professor Peabody and his wife were at the same table, also Professor Hollis from Harvard.

On Tuesday, after listening to scientific papers, I visited the laboratories of the Hochschule and the Government standardizing laboratories, and in the evening attended the opera, "Figaro's Hochzeit," tickets having been presented by the German Engineers.

On Wednesday scientific papers in the morning, Hochschule in the afternoon, and the workshops of the Allgemeine Elektrizitätsgesellschaft in the evening.

Professor Peabody is in Europe to study the technical schools and the shipbuilding yards on the other side of the Atlantic. He went directly from Liverpool to Spezia in Italy, where there is an experimental tank for testing ship models. He is now making a tour of the technical schools of Germany, France, and Great Britain, and will make comparisons between the different methods of construction in vogue in the three countries. Professor Peabody is not expected to return to this country before the end of September.

The following members of the Faculty are also abroad for the summer: Professors Bartlett, Despradelle, Hovgaard, Moore, Smith, Sumner, Goodwin, and Lodge.

The Institute has been represented by members of the Faculty at the recent meetings of the American Association of Civil Engineers at the Thousand Islands, the Society for the Promotion of Engineering Education at Ithaca, the National Association for Testing Ma-

terials at Atlantic City, and the American Society of Electrical Engineers at the same place.

Mr. T. C. Hu, B.S., M.C.E., and Mr. H. Tsing were the guests of the Institute on April 20. Mr. Hu and Mr. Tsing are Provincial Commissioners from China, and are inspecting the American colleges. Mr. Tsing is president of the "Imperial Szechuen University" of China, and Mr. T. Hu is the chief engineer of the Hankow and Szechuen Railroad of China. Mr. Tsing is a graduate of Cornell University in the class of 1905.

#### APPOINTMENTS

The new programme, issued early in June, announces the following appointments: Professors Crosby, Woods, and Goodwin are promoted to full Professors; Professors Gill, Robbins, Laws, Fuller, Johnston, Hough, and McKibben to Associate Professors; Instructors George in Mathematics, Robinson in English, and Locke in Mining and Metallurgy become Assistant Professors. The following appointments of Instructors are also published:—

Myron W. Dole in Mechanical Engineering, Raymond Haskell in Theoretical Chemistry, Addison F. Holmes in Mechanical Engineering, Guy W. Eastman in Physics, Charles Field, 3d, in Organic Chemistry, Gerald F. Loughlin in Geology, Champion H. Mathewson in Analytical Chemistry. The new Assistants are as follows: Herbert A. Bailey in Technical Analysis; S. H. Grauten, Charles D. Richardson, and Edward B. Rowe in Electrical Engineering; James I. Banash, Herbert P. Hollnagel, and Claude S. McGinnis in Physics; John F. Norton in Organic Chemistry; George F. White and Frederick H. Willcox in Analytical Chemistry; Burton W. Kendall in Electro-Chemistry.

#### GRADUATION

The graduating class of 1906 numbered not less than 277, distributed by courses as follows: Civil Engineering, 46; Mechanical Engineering, 69; Mining Engineering and Metallurgy, 38; Architecture, 22; Chemistry, 21; Electrical Engineering, 37; Biology, 2;

Physics, 7; Chemical Engineering, 10; Sanitary Engineering, 6; Naval Architecture, 19.

The class of 1906 numbered at entrance 457, of whom 177 are included in the above

The geographical distribution of the graduates is as follows:—

California . . . . .	5	Pennsylvania . . . . .	12
Colorado . . . . .	6	Rhode Island . . . . .	2
Connecticut . . . . .	5	Texas . . . . .	4
District of Columbia . . . . .	2	Vermont . . . . .	4
Georgia . . . . .	1	Virginia . . . . .	2
Illinois . . . . .	10	Wisconsin . . . . .	7
Indiana . . . . .	1		270
Iowa . . . . .	1		
Kansas . . . . .	1	<i>Foreign</i>	
Maine . . . . .	7	Brazil . . . . .	1
Massachusetts . . . . .	154	Cuba . . . . .	1
Michigan . . . . .	1	Hawaii . . . . .	1
Minnesota . . . . .	1	Ireland . . . . .	1
Missouri . . . . .	9	Mexico . . . . .	1
New Hampshire . . . . .	8	Porto Rico . . . . .	2
New Jersey . . . . .	4		7
New York . . . . .	15		4
Ohio . . . . .	5	Total . . . . .	277
Oregon . . . . .	3		

The somewhat exceptional size of this class may naturally be connected with the fact that it entered the Institute just ahead of the increase in tuition fee and the advance in entrance requirements.

#### FELLOWSHIPS

D. F. Comstock, '04, continues his study in Europe as a Savage Fellow; W. K. Lewis, '05, has been awarded Swett Fellowship; R. C. Tolman, '03, has been awarded Dalton Fellowship; G. W. Eastman, '04, H. T. Kalmus, '04, and E. W. Washburn, '05, have been appointed Austin Fellows. M. H. Whitehouse, a fifth-year

student, has been awarded the travelling scholarship in Architecture offered by Guy Lowell and others.

#### THE ROTCH PRIZE

The Rotch prize to regular students in Architecture has been divided between A. A. Blodgett, '06, and J. T. Wrinkle, '06, that to special students between F. C. Lebenbaum and R. G. Stebbins.

#### WILLIAM T. SEDGWICK—FESTSCHRIFT CELEBRATION

Thursday, June 14, at the Hotel Westminster, Boston, a dinner was given to Professor W. T. Sedgwick, head of the Biological Department, by his former students, in honor of the twenty-fifth anniversary of the receipt of his doctor's degree from Johns Hopkins University.

Seventy persons were present, over sixty of whom have studied in the Biological Department since Professor Sedgwick became its head in 1883. Among the latter were Professors E. O. Jordan and A. P. Mathews, of the University of Chicago; Professor Severance Burrage, of Purdue; Professor G. N. Calkins, of Columbia, and Messrs. G. W. Fuller, G. C. Whipple, and Allen Hazen, of New York; M. O. Leighton, of the United States Geological Survey; Dr. E. C. Levy, city bacteriologist of Richmond, Va.; F. F. Longley, superintendent of the Washington filter plant; W. S. Johnson, of the Massachusetts State Board of Health; B. R. Rickards, city bacteriologist of Boston; Dr. Augustus Wadsworth, of the College of Physicians and Surgeons, New York; Dr. F. S. Hollis, of the Yale Medical School; E. E. Lochridge, engineer of the Springfield Water Department; Dr. F. W. White, of Boston; Dr. J. A. Rockwell, Jr., of Cambridge; Edward G. Gardner and Robert S. Weston, of Boston; Dr. Robert P. Bigelow; Professor Theodore Hough, of Simmons College; Professor B. E. Stone, of Amherst; Professors S. C. Prescott and C.-E. A. Winslow and Earle B. Phelps, of the Institute; and Mr. S. D. Gage, of the Lawrence Experiment Station.

There were also present, as guests, former President D. C. Gilman, of Johns Hopkins; Professor S. F. Clarke, of Williams; President Henry Lefavour, of Simmons College; Dr. L. P. Kinicutt, of the Worcester Polytechnic Institute; and Dr. Francis H. Williams, of the Corporation of the Massachusetts Institute of Technology.

Dr. Calkins acted as toastmaster. President Gilman, who conferred Professor Sedgwick's doctor's degree in 1881, and Professor Clarke, who was a student with him, spoke of the early days of Johns Hopkins University, to which the Biological Department of the Institute, through Professor Sedgwick, owes much of its inspiration. G. W. Fuller, Professor E. O. Jordan, Professor A. P. Mathews, Mrs. Stanley McCormick, and Professor C.-E. A. Winslow made brief addresses, expressing the regard and affection of the former students of the department for its head.

The evening closed with a speech by Professor Sedgwick himself, in which he expressed his appreciation of the occasion, and spoke of his connection with the great university at Baltimore and the great technical school at Boston, and of the duty which now rests upon the Biological Department of the Institute to train men for the conduct of the sanitary reforms which are spreading so rapidly all over the Union.

The chief event of the occasion was the presentation of a volume of Biological Studies, "dedicated by his pupils to William Thompson Sedgwick, to express their regard and admiration for him as a friend, teacher, investigator, and public-spirited citizen, and also to affirm their loyalty to the ideals for which he has always stood." The volume, which has been prepared in secret, and was a complete surprise to its recipient, has been published at the University of Chicago press, under the editorship of Professor E. O. Jordan. It contains nineteen original contributions to biology and sanitary science, the authors and titles being as follows: Gary N. Calkins, "Paramecium Aurelia and Paramecium Caudatum"; Harrison G. Dyar, "The Life-history of a Cochlidian Moth, *Adoneta bicaudata* Dyar"; George W. Fuller, "Experimental Methods as applied to Water and Sewerage Works for



Large Communities"; Marshall O. Leighton, "The Futility of a Sanitary Water Analysis as a Test of Potability"; George C. Whipple, "The Value of a Pure Water"; A. P. Mathews, "A Contribution to the General Principles of the Pharmacodynamics of Salts and Drugs"; Percy G. Stiles and Carl S. Milliken, "An Instance of the Apparent Antitoxic Action of Salts"; Edwin O. Jordan, "Experiments with Bacterial Enzymes"; C.-E. A. Winslow and Anne F. Rogers, "A Statistical Study of Generic Characters in the Coccaceæ"; Samuel C. Prescott, "The Occurrence of Organisms of Sanitary Significance on Grains"; Stephen DeM. Gage, "A Study of the Numbers of Bacteria developing at Different Temperatures and of the Ratios between such Numbers, with Reference to their Significance in the Interpretation"; C.-E. A. Winslow and E. E. Lochridge, "The Toxic Effect of Certain Acids upon Typhoid and Colon Bacilli in Relation to the Degree of their Dissociation"; Earle B. Phelps, "The Inhibiting Effect of Certain Organic Substances upon the Germicidal Action of Copper Sulphate"; Daniel D. Jackson, "A New Solution for the Presumptive Test for *Bacillus Coli*"; Henry S. Ayers, "B. *Coli* in Market Oysters"; Augustus Wadsworth, "Studies on Simple and Differential Methods of Staining Encapsulated Pneumococci in Smear and Section"; Arthur I. Kendall, "An Apparatus for Testing the Value of Fumigating Agents"; Theodore Hough and Clara E. Ham, "The Effect of Subcutaneous Injections of Water, Ringers Fluid, and 10 Per Cent. Solution of Ethyl Alcohol upon the Course of Fatigue in the Excised Muscles of the Frog"; Burt R. Rickards, "Notes on a Case of Apparent Pulmonary Tuberculosis associated with the Constant Presence of Diphtheria-like Organisms in the Sputum."

## DEPARTMENT NOTES

## MINING

The Summer School of the Mining Department this year visited the mines around Lake Superior. The party, in charge of Professor Richards, '68, and Mr. Locke, '96, including Hayden, Hay-

ward, and Heywood, '06, Hastings and Mayer, '07, Tse and Wen, '08, left Boston on the evening of June 6, arriving at Niagara June 7, where visits were made, through the kindness of Mr. E. G. Acheson to the Acheson Graphite Works, and through the kindness of Mr. Rogers, to the Carborundum Works. The methods of manufacture were gone over carefully. Then the Niagara Falls Power Company's two plants, with 50,000 H. P. and 60,000 H. P., respectively, were inspected. The afternoon was spent in seeing the Falls, Cave of the Winds, and the Gorge. The party then went by steamer from Buffalo to Cleveland, where they spent a few hours, going to Ashtabula by train.

Here, through the kindness of Mr. F. B. Richards, '84, of M. A. Hanna & Co., and of Mitchell & Co., they were furnished free transportation from Ashtabula to Duluth on the fine ore steamer "John J. Albright." The voyage was most delightful. One of the boys said it was as good as an ocean voyage, with many things to see thrown in. The Detroit River, Lake St. Clair, St. Clair River, are all most entertaining; also the beautiful park on Belle Isle, above Detroit, and the interesting colony at St. Clair Flats.

The lake shipping is most interesting. The sailing vessel is completely replaced by the various designs of steam freight boats. The much-talked-of whaleback has almost left these waters for the Atlantic. The lake type has supplanted all else. The largest of these are 600 feet long, with 12,000 tons' burden, making 10 knots an hour loaded, 12 empty, burn about 15 tons of coal in twenty-four hours. They can load in three hours and discharge in five hours.

Among the pleasure craft, rowing and sailing are almost lost arts. The motor-boats are here for everything,—for pleasure and for business. To be sure, sail-boat racing on water and on ice is still practised on Lake St. Clair.

The St. Mary's River and the Sault Ste. Marie, with all their activities, canals, and beauty of scenery, are most attractive. At the time of writing the party is here. The remainder of the trip includes Mesaba, Gogebic, and Menominee iron regions, the Houghton copper region, the "Soo" iron furnaces and electric

furnaces, and the Sudbury nickel mines and works. Members of this party are everywhere receiving the same kindness and hospitality that others have in the past, and they are doing their best to merit the confidence of their hosts.

The number of mining students who attended the Summer School was small, probably partly on account of the prosperity of the country at the present time, which gives vacation employment to the students either through their own solicitation or through the mining department.

The mining graduates have found places very rapidly this spring, there having been more places than men. That a few of the men are still not taken up is due to the fact that the particular line that they sought has not come to them.

A few changes are on the docket for the mining department. One of the chief is that the room used as a museum, under the old secretary's office, will have its floor raised a few feet, making two stories, one above the other. Professor Hofman and the library will be located in the upper, and the lower story will be devoted to metallography.

#### ARCHITECTURE.

M. H. Whitehouse, of Portland, Ore., a fifth-year student of the Department of Architecture, was awarded the travelling scholarship offered by Guy Lowell and others to the fifth-year man who should best work out a certain problem in design. Miss Ida A. Ryan was awarded first mention, and L. C. Clarke, Jr., second mention. The problem was a club-house and garage for a State automobile club. The value of the scholarship is \$1,200, to be expended in one year. The only conditions are that the winner shall sail for Europe by the 1st of September, and remain abroad a complete year, unless otherwise authorized. The programme for study abroad will be prepared in consultation with the Department of Architecture.

The nine competitors were given each a separate room in the middle of March, and since that time have worked separately without seeing one another's drawings until the competition was fin-

ished. The drawings all showed great originality, and according to Professor Chandler were of exceeding merit.

Every year the Boston Society of Architects offers two prizes of \$50 each, one to the regular and one to the special student who best solves a chosen problem in the fourth-year course in Architecture. This year the problem was a Monumental Fireplace in a building for the Hague Tribunal. The prizes were awarded to William Rasmussen, special, and J. T. Wrinkle, regular student; and the following men were mentioned in order of excellence,—Samuel Gideon and J. H. Cady of the specials and Charles G. Loring, A. A. Blodgett, and F. Logan for the regular students.

#### BIOLOGY.

The donor of the Sanitary Research Laboratory and Sewage Experiment Station has contributed a further sum of \$5,000 for continuing the work begun in 1903. An elaborate report of the results of the investigations of the first two years has been prepared by Professor C.-E. A. Winslow, biologist-in-charge, and Mr. E. B. Phelps, research chemist and bacteriologist, and will soon be published under the auspices of the Hydrographic Bureau of the United States Geological Survey.

#### CHEMISTRY AND CHEMICAL ENGINEERING

The third of the biennial Summer Courses in Industrial Chemistry began on June 6. The students taking part in the trip were Messrs. Moses, Mahr, Gonder, and Draper, of Course V., and Messrs. Peabody, Eisenhart, Lowe, Moody, Wells, and Fleming, of Course X., all members of the Junior Class. The course was, as usual, under the direction of Professor Thorp, and Professor Talbot accompanied the party, with the exception of the first half-day. The visits began on the afternoon of the 6th, at the sugar refinery of the Standard Sugar Refining Company in Boston, where an opportunity was afforded to see the processes involved in the purification of the crude sugar and also the methods of control employed. On

the morning of the 7th, the party left Boston for Pawtucket, where they visited the works of the B. P. Clapp Ammonia Company in the forenoon, inspecting the processes for the preparation of pure, concentrated aqueous ammonia from gas liquors. The afternoon was spent at the works of T. P. Shephard & Co., where Mr. E. D. Pearce conducted the party through the plant in which sulphuric acid is manufactured both from sulphur and from pyrites. A night on the Fall River Line boat and a short ride brought the party to Newark, where the forenoon was spent in visiting the establishment of the Central Stamping Company. Mr. T. M. Leman (1901), superintendent of the enamelling department, explained the mechanical and chemical operations involved in the production of agate ware and other similar utensils. The afternoon of the 8th was spent at the extensive plant of the American Smelting and Refining Company at Perth Amboy, where the metallurgy of the lead, silver, and gold-bearing copper ores and the electrolytic refining of copper were shown under the able guidance of Mr. F. F. Colcord ('98). Messrs. Marston, Baum ('04), Gallop ('05), and Skowronski ('04) also gave the party a cordial greeting.

The evening of the 8th found the party in its Philadelphia quarters at Green's Hotel. The visits made in the vicinity of Philadelphia and the processes inspected were the following: Alexander Young Company, whiskey distillery; J. T. Lewis & Bros. Co., manufacturers of white lead, litharge, red lead, orange mineral, mineral pigments, and linseed oil; R. C. Remmey Sons Company, chemical pottery; Whitall, Tatum Company, Millville, N.J., glass works, making of bottles in great variety, carboys, beakers, flasks, etc.; Atlantic Refining Company, distillation and refining of crude oil and preparation of gasoline, burning oils, lubricating oils, and paraffine; Point Breeze Works of United Gas Improvement Company, manufacture and purification of both coal and water gas; Welsbach Light Company, Gloucester City, N.J., the manufacture of Welsbach lighting mantles; Joseph Campbell Company, Camden, N.J., preparation of canned soups, ketchup, salad dressing, etc.; Burke Brothers, tanning of goatskins and finishing of high-grade kid; Dill & Collins Company, preparation of soda pulp and manufacture of calendered papers.

On the afternoon of the 18th, the party left Philadelphia for Wilmington, where visits were made to the two mills of the Joseph Bancroft & Sons Company. Mr. D. M. Bates ('96) acted as host, and demonstrated the operations of the bleachery, the mercerizing process, and the dye-house. Baltimore was reached in the early evening, and became the headquarters for the remainder of the trip. The establishments visited near Baltimore were: Christopher Lipps Company, soaps and glycerine; Baugh & Sons Company, fertilizers; D. F. Haynes & Son, pottery, including the decoration of the ware; Carr-Lowry Company, glass works; Maryland Steel Company, complete metallurgical process from the iron ore to the finished rail (and also inspection of the ship-yards); Sharpe & Dohme, pharmaceutical preparations in great variety; Fred Bauernschmidt, beer brewery.

At each of these establishments no effort was spared to make the visit one of profit to the students, and in many instances the inspection of the plant was preceded by a talk by some one in authority upon the processes involved. The party was most delightfully entertained at luncheon by the Joseph Campbell Company, with Dr. J. T. Dorrance ('95) and John R. Odell ('03) assisting the host; also by the Welsbach Light Company, the Atlantic Refining Company, the Whitall, Tatum Company, and the Maryland Steel Company, the last through the courtesy of Mr. F. W. Wood ('77), the president. Mr. N. M. Randall ('85) also devoted himself to the entertainment of the party.

The usual evening conferences and discussions were held by Dr. Thorp, as far as they were needed, and considerable time was also available for visits to the pleasure resorts near Philadelphia and Baltimore. The trip, as a whole, was a marked success, and the courtesies extended by the manufacturers, which made it possible, are heartily appreciated by all concerned.

The following are the changes in the instructing corps in chemistry which have become effective or will soon become so: Professor Gill is promoted from Assistant to Associate Professor of Technical Analysis; Dr. L. W. Smith resigns to accept a teaching position elsewhere; Messrs. E. A. Barrier, N. E. Tousley, H. L. Jackson,

and Dr. R. B. Earle have resigned to accept technical positions; Mr. G. R. Taylor resigns to become a graduate student in biology, and Mr. R. S. Gifford to become graduate student and part time Assistant in Theoretical Chemistry; Mr. W. K. Lewis resigns to accept an Institute fellowship for study in Germany. The new appointments are: Mr. John F. Norton, Assistant in Organic Chemistry; Mr. Charles Field, 3d, Instructor in Organic Chemistry; Messrs. F. H. Willcox and G. F. White, Assistants in Analytical Chemistry; Mr. Arthur Neale, Assistant in Technical Analysis; Champion H. Mathewson, Ph.D., Instructor in Analytical Chemistry.

An innovation of the coming year is the appointment of two Research Assistants in Technical Chemistry: Mr. Leavitt N. Bent and Miss Helen R. Hosmer. These assistants will work under the direction of Professor W. H. Walker, probably on general problems relating to the corrosion of metals, and it is hoped that this feature of the departmental work may be developed in the future. Mr. Colby Dill will also work, as a graduate student, under Dr. Walker's direction.

The following appointments of Fellows for advanced study and research have been made: D. F. Comstock, Savage Fellow, for work in Physics in Switzerland or England; H. T. Kalmus and R. S. Williams, Austin Fellows, for work in Physical Chemistry in Germany; R. C. Tolman, Dalton Fellow, and G. W. Eastman and E. W. Washburn, Austin Fellows, for work in Physical Chemistry at the Institute; W. E. MacDonald, Saltonstall Fellow, for work in Mathematics at Harvard University.

#### MATHEMATICS.

Mr. McDonald has been granted leave of absence for graduate study at Harvard University. Mr. Miller returns after two years of study in Göttingen and at Harvard. Mr. Roever has just taken his doctor's degree at the latter university.



## GEOLOGY.

To see the great eruption of Vesuvius, Professor Jaggar sailed April 12, proceeded to Naples by way of Marseilles, Nice, Pisa, and Rome, arriving on April 23. The next day, in company with Dr. Tempest Anderson and two other members of the Alpine Club, he went to the volcano, and the party remained for several days on the high slopes of the mountain. They lodged at Cook's Hermitage Hotel adjoining the Royal Observatory, where Dr. Matteuci cordially greeted them.

On April 25 the party climbed to the edge of the crater, and had the good fortune to obtain photographs and a partial view of the interior of the new cauldron. On the 26th Professor Jaggar, in company with Mr. John Brigg, climbed Monte Somma, the outer ridge of Vesuvius. On the 27th collections were made of fallen lapilli and ash between the observatory and Naples. On the 29th the lava streams south of the cone were studied, and on the 30th an expedition was made to Pozzuoli and Baiæ.

Professor Jaggar has resigned his professorship at Harvard.

Professor D. W. Johnson is to lead an extended geological expedition into the Rocky Mountain region. Other members of the party will be Dr. H. W. Shimer, of the Institute, and C. H. Decker, M.E., of Poland, Ariz.

## ENGLISH

A change has been made in the method of conducting the second-term work in Second Year English, and the results have been most satisfactory. The class has been divided into sections of not more than fifty each, and thus instruction may be made to take less the quality of a formal lecture, and be given something of the character of a discussion. In connection with this class-room work has been established a series of conferences, in which the reading assigned is personally discussed between the student and the instructor. The needs of individuals, their shortcomings and their merits, may thus be taken into account, and it is felt that the whole course is thus made more vital.



A student is likely to make progress in proportion to the opportunity he has for expressing his impressions in regard to literature. What he has talked over becomes real to him in a way not to be expected in the case of what he has heard merely lectured about. He learns by putting his own thought into word; and the present system of conferences is meant to be less a method of keeping track of the faithfulness with which the assigned reading is accomplished than as a method of encouraging students to state frankly their impressions, their likes and dislikes for what they read, their doubts, and, above all, their admirations if they have them. The improvement under the new system is indicated by the fact that it has been found possible to excuse about a fifth of the class from the final examination, so satisfactory was the record of their work during the term.

#### MODERN LANGUAGES

The work of the department has been somewhat diminished by the action of the Faculty in cutting out one year of modern languages from the courses in civil and sanitary engineering.

There will be the usual Summer School in Modern Languages this summer. A new departure is made by dividing the work in each of the language courses into two courses, one corresponding to the first term's work, and one to the second term's work at the Institute. The regular summer school course thus covers one term's work instead of a year's work, as heretofore. It is calculated, however, to fit the student to do a term's work by himself, so that he may accomplish a year's work during the summer.

In the Institute courses the nomenclature has been changed from French I., French II., and French III., French Sight Reading, to Elementary French, Intermediate French, Advanced French, and French Colloquium. The corresponding changes are made in the German and Spanish courses.

Foreign books have been introduced into the regular summer reading for Institute students: one French and one German book for the First Year students, and one French, one German, and one Spanish book for Second Year students. A number of foreign books are

also added to the Supplementary List of Books for summer reading. The reading in a foreign language will count, page for page, the same as reading in English. The working of this innovation will be watched with considerable interest by the department, and perhaps by the members of the Faculty.

Professor Vogel went to New York in June for his duties as a member of the College Entrance Examination Board, Mr. Hare accompanying Professor Vogel as a reader. Both were thinking of going to Europe upon the conclusion of their work on the Board.

Mr. Blachstein and Mr. Dike intend to go to Europe after the Summer School. The other instructors expect to remain in the United States.

Professor Bigelow will be more or less engaged in his duties with the Massachusetts Volunteer Militia. He hopes to go South to visit some of the battlefields of the Civil War in the preparation of a volume on one of its campaigns for the press.

## THE UNDERGRADUATES

## JUNIOR WEEK

The first event of Junior Week was the Glee Club concert and dance, held in the New Century Building, April 25. The matrons were Mrs. George F. Swain, Mrs. Francis W. Chandler, Mrs. Harrison W. Hayward, and Mrs. Frank H. Rand. At noon on the following day, the exercises of the Institute having been suspended for the rest of the week, the annual rush for the first copies of *Technique* took place at a temporary shed, located behind the Art Museum.

## TECH SHOW

The first performance of the Tech Show was held at the Colonial Theatre on the same afternoon, other performances being given at the same place on the following afternoon, at Malden on Friday evening, and at Providence on Saturday evening. The libretto of "The Freshman" was written by G. H. Bryant, '07, the music being by E. H. Packard, '07, C. W. Coffin, '07, H. L. Moody, '07, C. L. Anson, '06, and H. S. Wonson, '07. The cast was as follows:—

Billy Benscoten, <i>The Freshman</i> . . . . .	W. M. SCHOFIELD, '09
Ted Briscoe, <i>A Senior on the Team</i> . . . . .	E. D. BOLES, '07
Steven Urquhart, <i>Captain of the Team</i> . . . . .	A. ELLIS, '08
Pat Luscomb, <i>Manager of the Team</i> . . . . .	W. B. JENKINS, '09
Karl Schlmihl, <i>A Student</i> . . . . .	KURT VONNEGUT, '08
Alex Wilson, <i>A Grind</i> . . . . .	R. H. ALLEN, '09
Alphonse Gaston, <i>A Restaurant Owner</i> . . . . .	W. A. ADAMS, '08
John Royden, <i>Trainer of the Team</i> . . . . .	G. M. HENDERSON, '06
Mignonne, <i>A Waitress</i> . . . . .	C. W. COFFIN, '07
Eurydice Benscoten, <i>Billy's Sister</i> . . . . .	J. B. SANDO, '08
Delia Foss, <i>An Athletic Girl</i> . . . . .	SEAUVER, '06
Sally Van Etten, <i>Billy's Fiancée</i> . . . . .	BANCROFT, '07

*Writers:* BROWN, '08; BULLARD, '08; FINNIE, '09; GARRATT, '07; HENDERSON, '06; JACCARD, '07; LORD, '09; SHAPLEIGH, '06.

*Football Men:* BOYNTON, '08; COFFIN, '08; CRITCHETT, '09; NICHOLS, '07; POPE, '09; REGNELL, '08; TAYLOR, '08; WALLIS, '09.

*Chorus Girls:* GILKISON, '08; HASTINGS, '07; HEARD, '09; HEROLD, '09; MARQUEZ, '09; STEPHENSON, '09; STIEBEL, '09; TRAUERMAN, '09.

*College Girls:* ARNOLD, '07; BELDEN, '09; EMERSON, '09; FOSS, '09; HAYNES, '09; KERR, '08; LOCKE, WHITMORE, '08.

*College Men:* BURLEIGH, '06; CALDWELL, '08; DOW, '09; DRAPER, '07; FREETHY, '08; HALL, '08; JOSLIN, '08; LAWRENCE, '09; MAYO, '08; NIX, '07; PARKER, '09; PENNY, '08.

The Show of this year departed a good deal from the usual vaudeville performance, partaking more of the character of a play with musical numbers. Most of the performers had appeared at previous Tech Shows, and, as a result, the acting and solo singing showed unusual proficiency and finish. The choruses were well sung, and in all respects the Show was entirely creditable to the young men who had worked so hard in preparing it. The management was as follows: R. W. Parlin, '07, general manager; J. D. Whittemore, '07, business manager; H. McCready, '08, assistant; J. B. Stewart, Jr., '08, assistant; Alexander Macomber, '07, stage manager; J. McGowan, Jr., '08, assistant; E. A. Hunt, '09, assistant; J. W. McMillin, '07, advance agent; W. F. Dolke, Jr., '08, press agent.

#### JUNIOR PROM

On Friday evening the Junior Prom took place in the ball-room of the Hotel Somerset, which was simply though beautifully decorated. The hall was crowded, and dancing continued until three o'clock. The Prom Committee consisted of John H. Leavell, Robert C. Albrog, Lawrence Allen, Emerson Packard, Donald G. Robbins, and William L. Woodward. The matrons were Mrs. Henry S. Pritchett, Mrs. Guy Lowell, Mrs. Eben S. Draper, and Mrs. William C. Endicott Jr. The patronesses were Mrs. Curtis Guild, Jr., Mrs. Roger Wolcott, Mrs. William C. Endicott, Jr., Mrs. James M. Crafts, Mrs. George F. Swain, Mrs. Francis

L. Higginson, Mrs. Henry S. Pritchett, Mrs. Guy Lowell, Mrs. William T. Sedgwick, Mrs. Eben S. Draper, Mrs. Desiré Despradelle, and Mrs. A. Lawrence Rotch.

#### SENIOR WEEK

The calendar of Senior Week was as follows: May 31, Senior Banquet at the American House, 6 P.M. Graduation reports distributed after the dinner. June 1, Alumni Reception at Engineering Building at 7.30 P.M. June 2, Musical Clubs' Concert at Huntington Hall, 8 P.M. June 3, Baccalaureate Sermon at Trinity Church, 4 P.M. June 4, Class Day Exercises at Huntington Hall, 2 P.M. Class Day Spread, on the lawn between Rogers and Walker, following exercises in the hall. Senior dance at Copley Hall, 8.30 P.M. June 5, Graduation Exercises at Huntington Hall, 2.30 P.M. Alumni Spreads in Engineering B, 4 to 6 P.M. Alumni Dinners at various clubs and hotels, 6 P.M. Tech Night at "The Pops," 8 P.M.

#### THE DINNER

The Seniors held their last undergraduate dinner Thursday evening, May 31, at the American House, with an enthusiastic attendance of over two hundred and fifty men. The guests were Dr. Pritchett, Mayor Fitzgerald, Messrs. Fred. P. Fish, George Wigglesworth, and Samuel Cabot, Professors Richards, Cross, Lanza, Swain, Chandler, Sedgwick, Dewey, Tyler, Porter, Talbot, Jaggar, Clifford, Merrill, and Bursar Rand. Andrew H. Keleher acted as toastmaster, being introduced by the chairman of the Dinner Committee, Louis Mesner. During the dinner R. C. Jackson, '06, R. R. Patch, '06, E. E. Orchard, '08, and W. B. Jenkins, '09, sang selections.

#### ALUMNI RECEPTION

To the martial music played by a band made up of all sorts of instruments the class of 1906 were welcomed into the great army of graduates by President Everett Morss, '85, of the Alumni Association.

President Pritchett, after welcoming the Seniors, spoke on the Relation of the Institute to the Commonwealth, saying that the Institute could well claim the increased support of the State.

Major Briggs, '81, spoke for the class graduated twenty-five years ago. Copeland, '76, representing his class, presented '06 with the "Ladder of Success," saying that there was plenty of room at the top.

'96 presented "The World to Conquer," a gold brick, a home, and an automobile. The stunt of the Seniors was a relay race, four men to a team, which was a combination of a pie-eating contest and a potato race.

#### BACCALAUREATE SERMON

The sermon was preached at Trinity, Sunday afternoon, by the rector, Rev. Dr. Alexander Mann. His text was, "When Jesus saw that he answered discreetly, he said unto him, Thou art not far from the kingdom of God" (St. Mark xii. 34).

#### CLASS DAY

The officers were: president, Maxwell Alanson Coe; first marshal, Herman Charles Henrici; second marshal, Charles Frederick W. Wetterer; third marshal, Herbert Lawrence Williams.

The exercises included: address by class president, M. A. Coe; address by first marshal, H. C. Henrici; statistics and history, C. F. W. Wetterer; prophecy, W. F. Englis; presentation oration, G. M. Henderson; oration, J. T. Lawton, Jr.; presentation of class gift, M. A. Coe.

In presenting the class gift, President Coe said: "Our class presents a hygienic marble fountain to replace that already in the main corridor of this building. This fountain was designed by an architect of our class, and has been purchased with money subscribed by members of the class. On a large tablet above the fountain is inscribed, 'Presented by the Class of 1906.'

"We give this fountain with a definite end in view; namely, to increase, if possible, the veneration and loyalty that the student

body holds for the Institute. We hope that the students of classes to come on drinking at this fountain will be inspired with some of that devotion to Technology which now thrills us."

#### GRADUATION DAY

At the Graduation Exercises abstracts of theses were read by ten men representing the different courses. Following these President Pritchett made a short address, and conferred degrees upon the following:—

#### MASTERS OF SCIENCE

James Lee Ackerson, George Herbert Barrows, Donald Raymond Battles, Sydney Atmore Caine, George Charles Funk, Richard Duncan Gatewood, Ida Annah Ryan, Gilbert Sanders Tower, William Henry Whitcomb.

#### BACHELORS OF SCIENCE

*Civil Engineering.*—Howard Parker Barnes, Charles Terrell Bartlett, Harold William Beers, Frank Arthur Benham, Laurence Gould Blodgett, Royall Douglas Bradbury, Ralph Henry Burke, George William Burpee, Clarence Elmore Carter, Arthur Mercer Chidhester, William Couper, Paul Nisbet Critchlow, John Charles Daly, Jr., George Lyman Davenport, Jr., Roland Parker Davis, William Frederic Farley, Carroll Andrew Farwell, Norman Paul Gerhard, Thornton Meriwether Gilmer, George Rockwell Guernsey, Wallace Ralph Hall, James Hayes, Jr., George Foster Hobson, Charles Albert Holmquist, Edward Ruddock Hyde, Ralph Dudley Kelley, Henry Kramer, Charles Tileston Leeds, William Hamilton Lincoln, Clifford Lynde, Elmer Dwight McCain, Joseph Newall McKernan, Louis Francisco Mesner, John Edward Lawrence Monaghan, Harvey Baxter Orcutt, Mark Hopkins Place, Edward Mason Read, Jr., Nestor Manuel Seiglie, Howard Payne Shaw, Arthur Louis Sherman, Guy Carleton Simpson, Percy Alexander Staples, Maurice Crawford Tompkins, Juan Francisco Urquidi, Franklin James Van Hook, Sylvester Cuthbert Wolfe, Herminio Yrizarry.



*Mechanical Engineering.*—Daniel Adams, John Wallace Anderson, Herbert James Ball, Fred Harold Bentley, Augustus Swaine Boynton, Harry Wheeler Brown, Charles Randall Burleigh, Charles Henry Chase, Arthur Morton Cheney, Walter Baker Clifford, Harold Vinton Otis Coes, Harry Hall Cook, Raymond Earl Cranstons, Robert Ellis Cushman, Theodore Augustine Dissel, David Darby Eames, Frederic Edward Earle, Thomas William Faber, Robert Douglas Farrington, Edwin Frederick August Frank, Flويد Merrill Fuller, Herman Trafton Gammons, William Waterman Gaylord, James Nickerson Gladding, Perley Kimball Griffin, William Abbott Hardy, Charles Whitney Hawkes, Herman Charles Henrici, Royal Robbins Heuter, Charles Alton Howard, Hans Otto Carl Isenberg, Joseph Warren Johnson, Karl Frank Juengling, Patrick James Kennedy, Jr., William Jared Knapp, Jorge Lage, Hunter Ulrich Light, William Isaac Lourie, Charles Allen Merriam, Charles William Mowry, Henry Hawkins Nelson, Jr., James Randall O'Hara, Jr., Henry Rathbone Patterson, Fred Sydney Phelps, Herbert Shaw Philbrick, Charles James Rich, Lewis Adams Riley, 2d, Paul Sylvester Schmidt, Robert Wyndham Seyms, Ernest Maxwell Smith, Philip Bartholomew Stanley, Donald Argyle Stewart, Allyn Chandler Taylor, DeWitt McClure Taylor, Wendell Phillips Terrell, Arthur Scott Thomas, Walter Hayward Trask, Jr., Louis Hillman Tripp, Arthur Townsend Trowbridge, Louis Tuckerman, William Camillo Turner, Clarke Edward Warren, Thomas Gray Webber, James Lippincott Wick, Jr., Sylvanus Wells Wilder, James Rice Williams, Edward Lowell Wilson, George Morris Winne, George Chester Young.

*Mining Engineering and Metallurgy.*—Raymond Jenness Barker, Earl Smith Bardwell, Walter Stanley Brown, James Marion Buchanan, Harry William Buker, Willis Amith Caypless, William Jefferson Deavitt, Walter George de Steiguer, Elmer Ellsworth Harrington, Ralph Hayden, Marden Warner Hayward, George Mitchell Henderson, Angelo Tilton Heywood, Leon Edwin Hirt, Harold Garfield Hixon, Thomas Barlow Holmes, Robert Hursh, Frank Richmond Ingalsbe, Fay Wilmott Libbey, Richard Vincent McKay, William Edward Hulbert Mathison, Henry Xavier



Mears, John Edward Murphy, William Neilson, Harold Cleveland Plummer, James Higbie Polhemus, Russell Peter Raynolds, Attwood Eugene Rippey, John Allen Root, Guy Hall Ruggles, William Adams Sheldon, Albert Leslie Stephens, Jean Philip Varian, Arthur Percy Watt, Arthur Edward Wells, Herbert Lawrence Williams, Charles Francis Willis.

*Architecture.*—Albert Alden Blodgett, George Holbrook Buckingham, George Elberton Burnap, Edmund Schureman Campbell, John Joseph Donovan, Edward Burrowes Evans, Williams Charles Furer, Alfred William Hertz, Bruce Rutchie Honeyman, George Fessenden Hunt, Ralph Templeton Cushman Jackson, Frank Logan, Harold Lord, Charles Greely Loring, Fred Clemens Lutze, Eleanor Manning, Edward Leodore Mayberry, George Curtis Noble, Louie Adelbert Parker, Henry Bowers Thomson, Ernest Albert Walter, John Timothy Wrinkle.

*Chemistry.*—Simeon Carlyle Allen, Herbert Stevens Bailey, David Bloom, Anna Margaret Cederholm, Edward Center Groesbeck, Helen Ross Hosmer, Harry Caleb Merriam, Alden Merrill, Charles Burrows Morey, Arthur Neale, Sherley Purl Newton, John Foote Norton, James Booth Lockwood Orme, James Garfield Riley, Mary Julia Ruggles, Henry Erich Kaseman Ruppel, George Pinckney Shingler, Jr., Lambert Thorp, Clarence Edward Tucker, George Frederic White, Frederick Hartwell Willcox.

*Electrical Engineering.*—Edwin Ball Bartlett, Frederick Russell Batchelder, Otto Bernard Blackwell, William James Cady, Sidney Taylor Carr, Juan José Cartagena, Eugene Preston Chase, Ralph Scudder Clarke, Stewart Clark Coey, David Cady Davis, Herbert Welton Dean, Edward Munroe Eliot, William Green, Henry Abraham Ginsburg, Charles Eaton Hamilton, Charles LeBaron Kasson, Andrew Hamilton Keleher, Howard William Key, James William Kidder, Edward Scholfeld Manson, Ashmore Breckenfeld Morse, Harold Morse, Harold Knapp Munroe, Walter Nathan Munroe, Galt Fayette Parsons, Burnell Poole, Clarence Brewster Powell, Charles Dana Richardson, Andrew Bartlett Sherman, Jr., Everett Chesebro Stanton, Edward Thomas Steel, Louis Arnett Thompson, Percy Ethan Tillson, Charles

Frederick William Wetterer, Herbert Stockwell Whiting, Leland Sargent Woodruff, Harold Eugene Young.

*Biology.*—Jane Boit Patten, Edgar Clifford Steinharter.

*Physics.*—James Ira Banash, George Choate Furness, Guy Hill, Herbert Percival Hollnagel, Burton Warren Kendall, Claude Stonecliffe McGinnis, Edward Bennett Rowe.

*Chemical Engineering.*—Leavitt Newell Bent, Colby Dill, Andrew Fisher, Jr., Harry Lewis Lewenberg, Harold Kay Merrow, Oscar Stoddard Pulman, Jr., Philip Bridges Sadtler, Ralph Nelson Sargent, LeRoy Holton Shipman, William James Walsh.

*Sanitary Engineering.*—Charles Frederick Breitzke, Samuel Arnold Greeley, Thomas Lesley Hinckley, James Robinson McClintock, Ralph Reginald Patch, Charles Saville, Charles Lyman Anson, Andrew Lane Bell, Howard Hayes Brown, Frank Atwood Browne, Walter Everett Chadbourne, Louis Robinson Chadwick, Edward Chandler, Robert Sidney Clark, Carl Francis Edwards, Robert Sherman Gardner, Charles McKay Huntington, Gilman Burt Joslin, Robert Joseph Lyons, Robert Ware Rose, Samuel Seaver, Everett Franklin Tomlinson, Samuel Langmaid Ware, Nathaniel Aldrich White, Nahum Clark Willey.

#### THE CLASSES

*Junior Class.*—On the evening of June 5 the annual Tech Night was held at the "Pops." About fifty members of the class were present, and all enjoyed themselves exceedingly. Members of the class also acted as ushers to escort the various classes into the hall.

*Sophomore Class.*—On April 7 the class held one of the most successful *Kommers* of the year. The committee in charge consisted of McGuigan, Vonnegut, Ellis, and Webb. Mr. Rand and Mr. Blachstein were the guests. There were about one hundred and fifty present, nearly all Sophomores. Mr. McGuigan was chairman for the evening; and those who took part in the entertainment were: Thomson, Williams, Rice, Vonnegut, McGuigan, Adams, Thöde, Barnes, and Gimson.

The first meeting of the *Technique* Electoral Committee was held on March 14. Between that date and April 9 there were twelve meetings, and the following men were elected to the board: as associate editors, G. S. Witmer, H. A. Rapelye, M. E. Allen, and B. L. Gimson; business managers, J. C. Brooks, H. R. Putnam, W. B. Given, and W. A. Adams; statisticians, W. R. Heilman and H. Webb; society editor, F. H. McGuigan; athletic editor, G. T. Glover; art editor, K. Vonnegut and E. I. Williams. The third member of the art staff will be chosen next fall by the board.

On May 7 the *Technique* Board held a meeting for the election of officers. H. A. Rapelye was elected editor-in-chief; W. B. Given, business manager; W. A. Adams, treasurer; and H. Webb, secretary.

#### CONVOCATION

President Faunce, of Brown University, was the speaker at the general convocation held in Huntington Hall, April 23.

#### PROFESSIONAL SOCIETIES

*Architectural Society.*—The society held its annual election of officers April 13, with the following result: president, F. A. Naramore, '07; vice-president, S. A. Marx, '07; secretary, S. R. T. Very, '07; treasurer, K. Vonnegut, '08; Executive Committee, C. F. Baker, '06, F. H. Kales, '06, and E. F. Lewis, '07.

The society has laid aside \$200 as the basis of a scholarship fund, which is intended to give aid to needy and worthy students of the Department of Architecture. The fund is placed in the hands of three trustees,—Professor F. W. Chandler, Professor W. H. Lawrence, and Bursar F. H. Rand,—appointed by President Naramore, '07. The net proceeds of the *Architectural Annual*, and of any other publication of the society, are to be added annually to the fund until it reaches \$1,000, when it will be handed to the Treasurer of the Institute in trust. The income is to be given to such needy students as the trustees believe worthy of

receiving aid. Circulars, setting forth the founding of the fund and its object, are to be sent to all the alumni of the department and to the resident architects of Boston, requesting their aid in building it up.

The society is contemplating changing its *Annual* to a magazine, to be published every two months, containing cuts of the current work of the department, together with criticisms of the work, articles by the professors and alumni, and a department for the alumni, with cuts of work being done by them.

The Pen and Brush Club of Harvard entertained the society at a smoker, May 8, in the assembly-room of the Harvard Union. Mr. Joseph Lindon Smith delivered a lecture on "Japan."

*Mining Engineering Society.*—The society held a meeting, May 8. Mr. A. W. Tucker, '98, now an assistant in the Mining Engineering Department, addressed the meeting on "The Virgilina Copper District of Virginia."

The society has elected officers, as follows: president, J. S. Coupal, '07; vice-president and treasurer, F. C. Jaccard, '07; secretary, J. N. Maxwell, '08. The Executive Committee will consist of the president, vice-president, and secretary, J. P. Chadwick, '07, and G. T. Bridgman, '08.

*Mechanical Engineering Society.*—The annual business meeting of the society was held May 1 at the Union. The following officers were elected for the ensuing year: A. G. Labbe, president; W. G. Hanford, vice-president; W. W. Bigelow, secretary; and A. B. Arnold, treasurer. E. D. Boles, C. Brewster, and Allen Pope were elected to the Executive Committee. Professors Lanza and Miller spoke.

*Electrical Engineering Society.*—The society enjoyed a pleasant and instructive trip, April 17, to the works of the General Electric Company at Lynn.

Twenty-five members of the society visited the L Street plant of the Boston Edison Company, May 3.

*Civil Engineering Society.*—The society held a meeting April 30 to elect officers for the ensuing year. The results were as follows: president, H. B. Hastings, '07; vice-president, R. C. Albro, '07; sec-

retary, M. E. Allen, '08; treasurer, T. W. Orr, '08; Executive Committee, J. M. Barker, '07, chairman, H. P. Farrington, '07, S. Allen, '07, H. J. Ruggles, '08; Programme Committee, E. W. James, '07, chairman, R. C. Albro, '07, H. B. Alvord, '07, and C. H. Boylston, '08.

Mr. Frank W. Hodgdon, '76, chief of the Massachusetts Land and Harbor Commission, gave a very interesting talk at the society's smoker, May 11, at the Union. He told of the Commission's work on the harbors and channels along the Massachusetts coast, and gave a number of stereopticon views on the subject. He also spoke of the reclamation of land in and about Boston, and told how the Back Bay District was built up.

#### CLUBS

*Co-operative Society.*—The annual meeting of the board of directors of the society was held May 15 in the Trophy Room. The officers for the ensuing year were elected as follows: president, Alexander Macomber, '07; vice-president, H. B. Hastings, '07; treasurer, A. D. MacLachlan, '96; secretary, Bryant Nichols, '07; directors, C. H. Boylston, '08; V. C. Grubnau, '08.

During the year the directors have set aside \$950 for scholarships.

*Civic Club.*—The club held a dinner May 8 at the Tech Union. Mr. Homer Albers and Professor Dewey were the guests of the evening. Mr. Albers spoke on "The Progressive Inheritance Tax." Professor Dewey spoke on "Present Day Conditions." The election of officers for next year resulted as follows: president, Bachman; vice-president, Dyer; secretary, Pastoriza; treasurer, Udale.

*Walker Club.*—The club held a dinner on May 10 at the Technology Club. After the dinner a business meeting was held, and the following men were elected officers for the ensuing year: president, D. G. Robbins, '07; secretary-treasurer, B. L. Gimson, '08. Messrs. F. H. Rand and I. W. Litchfield were elected honorary members.

Professor Bates addressed the club, taking as his subject "An Avocation."

*British Empire Association.*—At a meeting of the association held May 11 the following men were elected officers for next year: chairman, M. E. Denny, '08; vice-chairman, B. L. Gimson, '08; Executive Committee, E. E. Wells, S. M. Udale, '06, and E. M. Bettington.

*Mechanic Arts H. S. Club.*—The club held a dinner at the Union April 20. President E. O. Hiller presided. The election of officers was announced as follows: E. O. Hiller, president; O. G. Fales, vice-president; R. B. Weiler, secretary. The guests were Dr. Parmenter, head-master of the M. A. H. S., and Messrs. Parish and Reed, instructors.

*Newton H. S. Club.*—The club held its second annual dinner at the Union April 20. The toastmaster was President G. M. Henderson, '06. The speakers were Head-master Adams and Masters Meserve, George, and Palmer, of the Newton High School, ex-President R. H. W.-Lord, '05, and W. K. Lewis, '05. A dozen members of the senior class at high school, who intend to come to Tech next year, were the guests of the club.

*Musical Clubs.*—The clubs held their annual dinner at the Copley Square Hotel. Officers for the coming year were elected as follows: president, Swett, '06; vice-president, Keyes, '07; secretary, Fales, '07; general manager, Gardner, '08; Glee Club, Keyes, '07, leader, Jenkins, '09, manager; Banjo Club, Fales, '07, leader, Gerrish, '08, manager; Mandolin Club, Thompson, '08, leader, Scharff, '09, manager.

#### TECH SHOW

At the Tech Show dinner, May 4, Alexander Macomber, '07, presented Mr. James Francis with a handsome set of cut-glass decanters and glasses, with a tray to match, as a testimonial to him of the regard in which the cast and management of the Show hold him.

The guests were James Francis, George Wigglesworth, Treas-

urer of the Corporation, Professors Clifford and Wendell, Mr. Rand, Mr. Stinus, Brown, '01, who did three-quarters of the work of the Show at Providence, and Major Briggs. George Bryant, '07, also spoke on "What I did Friday Afternoon." R. W. Parlin, '07, presided.

The following men have been officially appointed to the managing staff of the Tech Show for next year: general manager, A. Macomber, '07; business manager, H. McCready, '08; stage manager, T. McGowan, Jr., '08.

#### KOMMERS

At Senior Night at the *Kommers* President Pritchett gave a talk on the Cabot Medals. He was forced to depart early, so Dean Merrill took his place in presenting the medals to the men who have already won them. The other speakers were Major Briggs, John Mahan, and W. C. Towne. M. A. Coe, '06, was toastmaster.

A big marble clock, presented by the class of 1906 to the Union, has been hung in a conspicuous place, and adds greatly to the appearance of the room.

The men given Cabot medals are as follows: 1901, W. A. Kemper, H. B. Pulsifer, B. D. Solomon, G. D. Wilson; 1902, W. L. Adams, J. F. Ancona, G. H. Clapp, W. C. Phalin, J. B. Whitmore; 1903, L. T. Buell, G. R. Kaiser, R. G. Kennedy, W. N. Munroe, E. F. Parker, Jr.; 1904, J. C. Damon, F. P. Poole, J. P. Stow, Jr.; 1905, A. E. Hartwell, A. T. Heywood, A. H. Keleher, C. B. Mayer, and H. G. Pastoriza.

General William A. Bancroft, president of the Boston Elevated Company, delivered a lecture, illustrated by lantern slides at the *Kommers*, April 21, before an audience of over one hundred and fifty men.

The last *Kommers* of the year, May 12, was addressed by Mr. John Z. White, of Chicago, on the subject of "The Single Tax."



## ATHLETICS

The Annual Interscholastic Competitive Drill was held in South Armory May 2. Ten high schools entered teams of three men each. The exercises commenced with a company drill by the M. I. T. C. C., Captains Dolke, Heath, Lufkin, and Perry commanding. The battalion was then drawn up in battalion formation by Adjutant Hodsdon, and Company D acted as escort to the colors. Battalion drill, under command of Major Carter, followed.

The Competitive Drill was followed by Dress Parade by the Freshman Battalion. The cup for the greatest number of points was awarded to Stoneham High School. All three members of the Stoneham Team were among the eight point winners, giving a total of twelve points. M. Pratt, of Lowell High School, won the individual gold medal for first place, and the silver medal for second place was awarded to W. R. Sleeper, of Stoneham High School.

## ANNUAL SPRING CLASS MEET

The annual spring class meet at Tech Field, April 21, was won by 1906 with a total of 67 points, 1908, with  $57\frac{1}{2}$  points, being a close second. This result, together with the results of the indoor meet in the winter, in which 1906 won with a total of 35 points, gives the Senior Class the championship in track athletics for this year.

The consolation meet of the Athletic Association, open to all men who did not win points in the spring meet, was held May 14 at the Field.

## DUAL MEET WITH WILLIAMS

By taking all three places in the last event of the meet, Williams won the first dual meet it has had with Technology, May 12,  $66\frac{2}{3}$  points to  $59\frac{1}{3}$ .



## INTERCOLLEGIATE MEET

In the intercollegiate meet, held at Tech Field on May 19, Dartmouth was an easy winner. Brown was second, with Tech a very close third. The final scores were:—

	<i>Points.</i>		<i>Points.</i>
Dartmouth . . . . .	36	Amherst . . . . .	11 $\frac{1}{2}$
Brown . . . . .	23	Tufts . . . . .	8
Tech . . . . .	21 $\frac{5}{8}$	Bowdoin . . . . .	5
Williams . . . . .	19 $\frac{5}{8}$	Trinity . . . . .	2
Maine . . . . .	14 $\frac{1}{2}$	Vermont . . . . .	0
Wesleyan . . . . .	12 $\frac{1}{2}$		

## TENNIS

Technology's two representatives in the annual tournament of the New England Intercollegiate Tennis Association won the New England intercollegiate lawn tennis championship, May 31, by defeating Smith and Westcott, of Williams, 3-6, 6-4, 6-4, 6-8, 7-5. Fanning also secured second place in the singles, being beaten, after a hard-fought match, by F. R. Smith, Williams.

## THE GYMNASTIC TEAM

The second annual exhibition of the Technology Gymnastic Team was held April 13 in the Gymnasium, under the direction of Mr. W. C. Towne. There were two teams, which took turns in competing in the twelve events. The best all-round work was done by Captain Griffin, '06, Lourie, '06, and Smith, '06, all of whom excelled in their work on the flying rings, horizontal bar, and parallel bars.

## TECH FIELD

Important improvements at Tech Field will be made during the summer.

One of the most important changes will be the moving of the

bleachers to the other side of the field from that which they now occupy.

A 220-yard straight-a-way will be built over the ground where the grand stand now is. The whole grounds are also to be levelled up and put into better shape.

#### CROSS COUNTRY ASSOCIATION

The Cross Country Association held a meeting April 6, and chose officers for the ensuing year as follows: L. Allen, '07, president; C. S. Clapp, '08, secretary; H. R. Callaway, '08, captain; O. H. Starkweather, '07, manager; B. R. Hunter, '09, chase captain.

#### CABOT MEDALS

Cabot medals for the most marked improvement in physical training during the year have been awarded to Tuckerman, '06, Greenwood, '07, Tresnon, '07, Tobin, '08, and Saeger, '09.

## THE GRADUATES

## THE NORTH-WESTERN ASSOCIATION

The most important item of interest that has come before the Association is the active work in behalf of the "Alumni Fund." We have been greatly handicapped in connection with this work through the lack of information as to the policy pursued by the Institute, now that the merger question has been settled. Our Local Fund Committee was appointed, consisting of the following: E. H. Huxley, '95, chairman; J. T. Cheney, '03, secretary; S. M. Felton, '73; F. K. Copeland, '76; T. W. Robinson, '84; S. Sturges, '87; J. L. Shortall, '87; L. A. Ferguson, '88; E. M. Hagar, '93; H. P. Beers, '97; and a very active campaign entered upon. An appeal and subscription cards were sent to 250 members in and around Chicago, under the date of June 4, and it gives me great pleasure to report that the results are very gratifying, considering the short time since the question was put before them. Our aim is to place Chicago second on the list, which is the position she should hold in the total amount of subscriptions.

On May 7 the committee entertained Mr. Frederick P. Fish, a member of the Corporation, at the Chicago Club, and we passed a very pleasant evening. The talk was informal, and the clear expression of the present and future plans of the Institute by Mr. Fish has done more to revive the seemingly dormant spirit of our members than any one thing.

Our Association has always included all Institute men west of Pittsburgh and Buffalo, but, in view of the fact that Cincinnati, Denver, and some other Western cities now possess thriving Tech clubs, we thought best to modify our policy somewhat, so as to include only the North-west Territory, as the name implies. This does not appreciably reduce our active membership, those paying dues, but gives us a body upon whom we can rely. A hearty invitation to all our meetings and dinners is extended, as heretofore,

to Institute men, and it is our aim to keep the whole Alumni Association informed of such gatherings. Do not fail to join us, if possible.

A directory of members of the North-western Association will soon be published, which will contain addresses and telephone numbers; and we feel this will tend to keep the members in closer touch, and promote good fellowship.

JOHN T. CHENEY, *Secretary*,  
878 South Halsted Street, Chicago.

#### WASHINGTON SOCIETY OF THE M. I. T.

The regular semi-monthly meetings of the society have been continued during the past three months.

On March 26, Myron L. Fuller, '96, of the Division of Hydrology, United States Geological Survey, and his associate, F. G. Clapp, '01, gave an interesting talk on a trip to Newfoundland and the coast of Labrador which was taken by them last summer, Mr. Clapp's talk covering the first part of the trip to and through Newfoundland, and Mr. Fuller continuing with the part beyond, up to the point where the arctic ice-fields prevented further progress of their steamer along the steep, rocky shores of Labrador, and compelled their return. Starting about July 8 from Boston, the round trip was made in a little less than a month. Maps and a full collection of photographs added to the appreciation with which the talk was received.

A special meeting of the society was held on April 19 on the occasion of the presence in Washington of Professor A. A. Noyes, chairman of the Faculty, and Professor Noyes gave a somewhat extended address on the present condition of the Institute and its needs and plans for the future, which was of special interest to the Washington alumni at this time. The address dealt with a situation of affairs from which several of the recent uncertainties have been removed, but which presents new problems which the alumni must have an important part in solving. It is safe to say that all those present at this meeting came into a much clearer understanding of several of these problems. Professor Noyes's talk was, on the whole, distinctly encouraging for the future.

An important contribution to the discussion which followed was an address by Mr. F. H. Newell, '85, Washington's newly elected member of the Corporation, on the actual practical value of the Technology training, with particular reference to the Government Reclamation Service. Some of the more important points developed in the addresses and discussion were the desirability of maintaining a high standard of work at the Institute, of developing the department of graduate work as much as possible, and of providing for the regular carrying on of research work by instructors, and the necessity of regular courses of work in summer schools by the undergraduates for practical training, and of compulsory physical training during the school year.

At its meeting of May 14 the society listened to an informal talk by Lieutenant Colonel Andrew H. Russell, '68, an army expert on ordnance and small arms, on "The Development of the Modern Magazine Gun for Military Purposes," illustrated by an exhibit of a large number of samples and models. Colonel Russell has been for a number of years an inventor in the line of magazine devices for small arms, and some of the important features of army rifles, of types now known under other names, originated with him. His talk covered in brief the entire history of the development of such guns.

The following new names have recently been added to the secretary's list of Tech men in Washington: George H. Bliss, '96; Arthur C. Willard, '04; Arthur Winslow, '06; P. A. Blair, E. L. Wilson, Frank Toohey, '01; Fred W. Guibord, '05; Gorham Crosby, '05; and Herbert W. Kenway, '06,—the last four being examiners in the Patent Office.

Albert S. Merrill, '00, who for some years has been an active worker in this society, having served at different times as its treasurer, secretary, and member of Executive Committee, has left his position at the National Bureau of Standards, to take a new one with the Sullivan Machinery Company of Chicago. His associates here all deeply regret his going.

F. W. SWANTON, '90, *Secretary*,  
1641 13th Street, N.W., Washington, D.C.

## THE M. I. T. CLUB OF CINCINNATI

The Cincinnati M. I. T. Club at its last meeting reluctantly accepted the resignation of its president, Mr. George W. Kittredge, class of '77. Mr. Kittredge left Cincinnati in April to assume the position of chief engineer of the New York Central & Hudson River Railroad, which we look upon as one of the highest positions in railroad engineering that this country can offer. After leaving the Institute, he worked for a short time on the development of the South Boston Flats, where the New York, New Haven & Hartford Railroad is now located, and in 1880 went to the Pittsburgh, Cincinnati & St. Louis Railway Company, one of the Pennsylvania lines, being employed in the maintenance of way department for ten years. In 1890 he went to the Cleveland, Cincinnati, Chicago & St. Louis Railway Company, and in '91 was made chief engineer of that company, holding the position until his well-merited promotion. Mr. Kittredge will make his headquarters in New York.

R. W. PROCTOR, '94, *Secretary*,  
5th and Pike Streets, Cincinnati, Ohio.

## TECHNOLOGY CLUB OF NEW BEDFORD

The final meeting of the season of 1906 of the Technology Club of New Bedford was held at the home of Mr. Edgar R. Hammond on May 24, when fourteen members were present.

The question as to whether the club would subscribe to the Technology Fund as a club or individually was thoroughly discussed, and it was decided to do nothing as an organization, but leave it to the different members to make their subscriptions as they saw fit. The meeting adjourned to meet again in the fall.

A poll of the members shows that but seven have followed out the business indicated by the course they took at the Institute. Two of these are teachers. Of the others, six are in private business, three are at the head or in the service of corporations, one is in newspaper work, and one retired.

CHARLES F. WING, JR., *Secretary*,  
34 Purchase Street, New Bedford, Mass.



## THE TECHNOLOGY CLUB OF HARTFORD

Replying to your favor of the 26th ultimo, asking for news of our Association, would say that, as we have discontinued our meetings until fall, we have not very much of importance to report.

On the 5th of May a meeting and banquet was held at Hartford under the auspices of the Hartford Technology Club. A committee was appointed to make arrangements for the next meeting of the Association: Edmund P. Marsh, chairman, Box No. 791, Springfield, Mass.; E. Ellsworth Horton, Windsor Locks; C. E. Whitney, Hartford, Conn.

After the meeting a dinner was served and remarks made by Everett Morss, President of the Alumni Association, and Professor Porter, who represented the Faculty.

GEORGE W. BAKER, '92, *Secretary*,  
Box 983, Hartford, Conn.

## THE VERMONT TECHNOLOGY ASSOCIATION

The annual meeting of the Vermont Technology Club was held in Burlington at the Van Ness House on Friday evening, April 27. There was a regrettably small attendance, partly owing to the short notice given to the members, as the arrangements were not completed for the dinner until a few days before. Mr. C. P. Moat, '96, was elected president; Professor Ernest C. Bryant, '93, of Middlebury College, vice-president; and Professor E. C. Jacobs, '97, of University of Vermont, was elected to the Executive Committee for two years, the other member of the Executive Committee being H. W. Clement, of Rutland, who was elected last year for a two years' term.

Our membership this year has been somewhat decreased by the removal from the State of several of our last year's members, among them L. F. Miller, '01, who moved with his wife to San Francisco, arriving there just in time for the earthquake. Miller wrote a very funny letter to the secretary, giving a most graphic account of

his experiences, including "cooking in the street." Fortunately, Mr. Miller and his wife escaped injuries and property loss, as their household effects, which they were shipping from the East, had not reached them.

Since the meeting our president has taken unto himself a wife. We sincerely hope that he will not furnish us the Biblical excuse at our next meeting in September or October.

R. PROCTOR, JR., '02, *Secretary & Treasurer*,  
Proctor, Vt.

#### TECHNOLOGY CLUB OF NORTHERN OHIO

When Professor Allen went West in March to attend the American Railroad Engineering and Maintenance of Way Convention, he stopped off for a day in Cleveland, and assisted in forming an active alumni association among the old Tech men in Cleveland and vicinity.

Twenty-two members gathered at the University Club on the evening of March 23, and listened to very interesting remarks from Professor Allen relative to present conditions and future prospects at the Institute. A temporary organization was effected, and committees appointed to establish it on a permanent basis. The fellows gathered informally about a huge grate fire in the lounging-room of the club, and the time was pleasantly spent.

Subsequently several committee meetings were held, and on April 9 the second gathering assembled at the University Club. Thirty-two members were on hand to launch the "Technology Club of Northern Ohio," with the following officers in command: president, Franklin B. Richards, '84; vice-president, Robert B. Wallace, '99; secretary-treasurer, Sidney Y. Ball, '03; Executive Committee, Azel Ames, Jr., '95, Frederick Metcalf, '90, Edward R. Motch, '97, G. E. Merryweather, '96, James Ritchie, '78.

Plans were discussed to determine the nature of future meetings, a constitution and by-laws adopted, and the organization established on a permanent basis. The meeting was on the "Dutch lunch"

order, and reminded some of the younger members pleasantly of the *Kommers* at the Tech Union.

Cleveland is a wonderfully busy manufacturing city, and our great industrial enterprises are attracting more Tech men every year, so that the Northern Ohio Club will be large, active, and very much alive to the interests of Alma Mater.

SIDNEY Y. BALL, '03, *Secretary*,  
Ball Building, Cleveland, Ohio.

---

THOMAS A. EDISON ON THE M. I. T.

From *Pearson's Magazine*, August, 1906, p. 124.

---

"One of the most significant evidences of the tendencies of the age is the fact that, while the hours of muscular work are becoming shorter, the hours of brain work are growing longer. Science is making the executive problems of production more involved, and at the same time it is simplifying and lightening the burdens of mere animal effort.

"Go to the Bethlehem Steel Works, and see young men of twenty-five and thirty years in charge of the big hammers and machines. Why? Because they are graduates of the Massachusetts Institute of Technology. If there were ten such schools in Boston, their graduates would be gobbled up as fast as they came out."

## NEWS FROM THE CLASSES

1868.

PROF. R. H. RICHARDS, *Sec.*, Mass. Inst. of Technology, Boston.

---

At the dinner and Pops the class of '68 had quite a full representation. Eben S. Stevens, S. S. Whitney, W. S. Jackson, A. F. Hall, and R. H. Richards were there. Hall, however, did not go to the Pops.—J. Rayner Edmands of '69 joined '68 at the Pops, and swapped stories with them.

1875.

E. A. W. HAMMATT, *Sec.*, 10 Neponset Block, Hyde Park, Mass.

---

The class had two representatives at the dinner held by the classes of '68-'77 at the Tech Club on the 5th inst., and the same at the Pop Concert. This is not very encouraging to the secretary, who sent out about 25 to 30 special notices to men within easy reach of Boston, and received but 3 replies.—Edes has written a very interesting letter regarding the earthquake and fire in San Francisco. He says regarding the sensations experienced during the shock that the best comparison he can give is that of trying to walk through a rapidly moving train while going around a curve; also that the principal damage by the "quake" was to chimneys, poorly constructed frame buildings, some brick buildings, and, of course, plastering, etc. The chief damage was by fire, which, he says, was four or five times the size of the Boston fire. . . . While many people lost practically all they had, the most doleful ones are those who were worth several millions and lost half a million or so.

1877.

RICHARD A. HALE, *Sec.*, Lawrence, Mass.

The notice of G. W. Kittredge's change to chief engineer of the New York Central Railroad was under the head of class '78 news in the TECH REVIEW. He was a '77 man, and had always been connected with the class.—The class of '77 joined in the spread given by the classes 1869 to 1884 at the Engineering Building B. There were but few '77 men present. At the class dinner at which classes 1869 to 1878 dined together at the Technology Club there were nine members of '77 present, mostly those living about Boston. Eight members attended the Pop Concert in the evening.—R. A. Hale has been retired from the Lawrence Park Commission after continuous service of twelve years. The last six years he has served as chairman of the board.—Fred W. Wood, one of the newly elected members of the Corporation from the alumni, came from Sparrow's Point to attend the regular corporation meeting and the reception given by Dr. Pritchett and Mr. Stone to the new members.—Joseph P. Gray, another newly elected member, was also present at both meeting and reception.—F. I. Sherman has a son who was graduated the present year in Course I.

1882.

WALTER B. SNOW, *Sec.*, 29 Russell Avenue, Watertown, Mass.

The class was represented at the Commencement dinner and the Pops by Gooding, Herrick, Munroe, W. B. Snow, and A. W. Walker.—The present address of H. H. Duker is 2229 St. Paul Street, Baltimore, Md.—Information has been received of the death of Clarence C. Lynch and Thomas H. Howard, both of whom were associated with the class for a short time.—Frank B. Cochran writes from Geneva under date of June 8: "I shall be abroad for at least another year. At present am touring Europe with a 35 H. P. 'Mercedes,'—an enjoyable pastime and rest from business."—Munroe

is chairman of a Social Education Congress to be held at Tremont Temple, Boston, on November 30, December 1 and 2. The object of the Congress is to present to the whole community the need of increased efficiency in social and industrial training, and it will be addressed by many distinguished men and women. In May he spent a week at the University of Illinois, giving a course of lectures on the History of Education.

1883.

HARVEY S. CHASE, *Sec.*, 27 State Street, Boston.

---

The class of '83 dined with '82 and '84 at the Technology Club, and from there went to the Pop Concert together. There were but three members present; namely, Smith, Capen, and Underwood.

1884.

PROF. WILLIAM L. PUFFER, *Sec.*, Mass. Inst. of Technology, Boston.

---

The class of '84 was very well represented at the dinner and "Pops," there being ten men present at the joint dinner of '82, '83, and '84 at the Technology Club, where a very enjoyable and cosy time was had in discussing the old days and the changes which have taken place among us since then. At the "Pops" there were ten of us, and we feel that the class of '84 was remarkably successful in getting together a larger number of men than any of the older classes.—'84 should feel especially proud, inasmuch as we have three members on the Corporation; namely, Rotch, du Pont, and Newell. du Pont and Newell both were able to be present at part of the festivities, and seemed much the same as they did in the old days, although there was considerable mutual joking concerning the thinness of hair in certain places, and other changes, which after all did not seem of consequence enough to account for the number of years that had passed since our own graduation day. We were also pleased to have with us one of our classmates, Pratt, who has gen-



erally been unable on account of business to join in our various class meetings. At the dinner there were present: Appleton, Bardwell, Gill, Mellen, Pratt, Puffer, Rotch, Ryder, Tyler, and Whitney. Appleton was not able to be present at the concert, and Bennett took his place, keeping up our numbers.

1885.

I. W. LITCHFIELD, *Sec.*, 161 Devonshire Street, Boston.

---

Mr. F. H. Newell, chief engineer of the United States Reclamation Service, has recently returned from an inspection of the works under construction in the Territories of Oklahoma, New Mexico, and Arizona, and in the States of California, Nevada, Utah, Colorado, and Kansas. Rapid progress is being made on construction. The work in its general magnitude now stands well toward the front of public undertakings. The expenditures on water storage and distribution systems aggregate about \$1,000,000 a month. Most of the large engineering problems have been worked out. The present rate of construction and expenditure is probably at the maximum, and will decrease gradually, many of the most expensive structures being now at the period of greatest activity. During his absence in the West Mr. Newell has been elected a member of the Corporation of the Massachusetts Institute of Technology, of which he is a graduate; also a member of the board of trustees of the Washington (D.C.) College of Engineering of the George Washington University. He has also been elected as one of the board of directors of the Washington Society of Engineers and chairman of the Committee on Meetings.—*Science*, May 8.

—Little has increased his laboratory force until he now has twelve assistants, eight of whom are Tech men. Under an appointment in the United States Forest Service he is supervising a long series of experiments to determine the paper-making quality of the pulp from a large number of American woods. Under his direction the government has equipped for this work a model sulphite mill, which is located in one of the buildings adjoining Lawley's plant at South Boston. He is also working in co-operation with the Bureau of Standards at Washington in the preparation of specifications cov-

ering the government's purchases of paper, and has recently been appointed official chemist to the American Paper and Pulp Association. On May 15 he presided at a very enjoyable dinner given at the Exchange Club by the honorary members of the K<sub>2</sub>S, the undergraduate chemical society, to the active and associate members.

1886.

PROF. A. G. ROBBINS, *Sec.*, Mass. Inst. of Technology, Boston.

---

Between forty and fifty members of the classes '85, '86, and '87, dined together at the Trade Club Tuesday evening, June 5. Several who were present for the first time since their student days entertained those present with stories and reminiscences of student and professional life. Soon after 8 P.M. the meeting was adjourned in order to attend "Tech night" at the Pops, Symphony Hall. The '86 men present were Aborn, Anthony, Chase, Cobb, Leach, Noyes, Peirce, Ricker, Robbins, J. M. Smith.—Pope was married on April 28, in Cambridge, to Miss Henrietta Warner Weisman. Mr. and Mrs. Pope reside at 10 Foster Street, Brookline.

1887.

EDWARD G. THOMAS, *Sec.*, 161 Devonshire Street, Boston.

---

Cobb has been appointed lieutenant colonel and assistant adjutant-general of the Second Brigade, M.V.M. He recently visited Costa Rica on an examination of mining properties in which he is interested.—Taintor has moved his law offices to Rooms 946 and 947, Exchange Building, Boston.—Sprague made a six weeks' trip to Nicaragua in April and May, to examine and report on a mining property. The country seems to have impressed him mainly as illustrating the advantages of Boston as a place to dwell.—Spaulding has moved the New York office of the Triumph Electric Company to 1123 Broadway.—Farwell is secretary of the Pleasant Canyon Mining Company, and expects shortly to rival any of the mining kings. It is

a gold property in Inyo County, California, well developed and equipped. He is still very busy with his architectural work.—The joint dinner of '85, '86, and '87 at Commencement time was well attended, and '87 was represented by Carpenter, Cameron, Draper, Sears, Fred Thompson, Very, Hildreth, F. A. Emery, E. G. Thomas, Tripp, Taintor, and Curtis. Later at the Pop Concert Lane, Proctor, and Coburn were added to our numbers. Emery was with us for the first time in eighteen years.—Henry M. Steele has accepted the position of head of the civil engineering department of J. G. White & Co., and will shortly move from Atlanta to New York City. His address will be 43 Exchange Place.—Todd will devote a large part of his time to the development of the New York Electric Music Company. The first floor and basement of the building on the north-east corner of Broadway and 39th Street has been rented for the first central station, and the upper room will be fitted up as an auditorium where the music may be heard and the machinery inspected. From this station music will be supplied by telephone up to the capacity of the station, 200,000 subscribers. It is expected that the station will be in operation November 1. The machinery will require 200 kilowatts for its operation.—Nickels is now in charge of the smelter of the Utah and Eastern Copper Company at Shem, Utah, "twelve miles up the river from St. George, which is sixty-five miles from anywhere." He writes:—

... Your letter of May 7 found here on my return from a two weeks' outing at our road-building camp on road to Acoma, Nev., a station on the Salt Lake and Los Angeles Railroad, forty-five miles away.

My outing consisted of wrestling a transit on steep side hills and through scrub oak.

I have been here since January 12, and have only been able to run furnace four days. I got nicely started, when the highest waters in the history of the country washed out our dam, as well as wagon road to railroad. This I replaced with a brush dam such as the Mormons use at the head of their irrigating ditches. This was taken out by the second and higher flood, and the channel changed, moving away from ditch head-gate, obliging us to go farther up stream and put in a wing dam besides a new brush dam at head-gate. Brush dams are not very scientific, but the interest on the cost

of a stone or timber dam will build one, and it is probable the former will last five or six years." . . .

1888.

WILLIAM G. SNOW, *Sec.*, 1108 Penn Mutual Building, Boston.

---

The annual dinner took place on June 5 at the Westminster. The following men attended: Sawyer, Eastman, E. W. Heath, Gage, Wood, Blanchard, Runkle, Bridges, and Snow. After the reading and acceptance of the secretary's report, A. H. Sawyer was re-elected president. After the dinner the class attended the Pop Concert, where Mead added one to the number.—The annual meeting of the National Electric Light Association was held in Atlantic City during the first week in June, under direction of President William H. Blood, Jr. The registration at this meeting was the largest of any held by this organization and the occasion was a great success in every way.—Edwin O. Jordan and Allen Hazen were present and spoke at the complimentary dinner recently given to Professor Sedgwick.—William H. Blood, Jr., has been elected a member of the Executive Committee of the New England Railway Club.—The *Boston News Bureau* of June 16 states:—

An engineering and construction company, with a fully paid in capital of \$250,000, has been organized by Stone & Webster, under the laws of Massachusetts, to engage in a general engineering and construction business in connection with large undertakings. The Engineering Corporation will take over the engineering part of the business of Stone & Webster, which was originally the important part of their general business.

Stone & Webster, some sixteen years ago, were among the first to enter the field of electrical development as electrical engineers and experts, the business soon reaching large proportions. During the last few years, however, on account of other important interests of the firm their efforts along these lines have been almost exclusively devoted to the requirements of the various companies under their management. As the firm desires to devote its time and energies to financial affairs and the management and development of the numerous properties which it operates, it has formed the Stone & Webster Engineering Corporation, the *personnel* of which will largely con-

sist of men who have been associated with the firm for years in connection with the engineering and construction side of their business. In addition, arrangements have been made to associate with the new company engineers of prominence in their various lines with the idea of placing it in a position to undertake engineering and construction work of importance throughout the country. All the stock of the company has been taken by Stone & Webster and their associates.

1889.

PROF. W. E. MOTT, *Sec.*, Mass. Inst. of Technology, Boston.

---

The annual dinner and reunion of the class was held at Young's Hotel, Boston, on Tuesday, June 5, the following men being present: Thurber, Kilham, W. L. Smith, Loring, Howard, Pickering, Hobbs, Lewis, Hollis, Mott, E. E. Pierce, Laws. After the dinner some time was given to the discussion of general Institute affairs, especially as concerns modification of the various course schemes with a view to increased efficiency of instruction. The resignation of Prof. F. A. Laws as secretary was presented and accepted, and Prof. W. E. Mott, of the Institute, was elected to fill the vacancy. Adjournment was had to Symphony Hall, where '89 did its best to add to the good cheer of "Tech night" at the Pops.—L. H. Kunhardt has been recently elected to the position of a vice-president of the Boston Manufacturers' Mutual Fire Insurance Company, taking the place of Mr. Joseph P. Gray, of the class of '76, who, following the death of Mr. Edward Atkinson, was chosen president. Mr. Kunhardt goes to the larger field after nearly sixteen years' connection with the inspection department of the Associated Factory Mutual Fire Insurance Companies, during which time he has been connected with the general plan, engineering, and inspection work, thus having a thorough foundation for his new duties. The Associated Companies, of which the Boston Manufacturers is one of the largest, have for years been the leading exponents of the best methods of fire protection and loss prevention. The result of bringing scientific methods to bear upon the problem has been that the cost of insurance of first-class manufacturing properties and storehouses has been reduced

to a point lower than has ever been possible by any other method.—The Inspection Department of the Associated Factory Mutual Fire Insurance Companies, of which E. V. French is engineer, has recently been developing a fire-service meter. The problem was of considerable complexity, for it was necessary to make a meter which would measure small flows as well as large ones, would cause but a small friction loss, and at the same time could not under any possible conditions obstruct the service in a way to interfere with the supply needed at time of fire. The details have been successfully worked out, and, when the device was explained to the New England Water Works Association a few months ago (*Transactions of the New England Water Works Association*, vol. 19, No. 3), it met with very general favor. No such meter has ever been developed before, although the call for it has been quite constant for some years among those interested in water-works systems.—W. H. Kilham reports that his firm have in progress quite a large number of buildings, including an eleven-room school-house in the town of Marblehead, and an addition of an entire seventh story to the Technology Chambers. This latter work involves a raising of the roof, and has quite a number of interesting constructional features. Kilham and Hopkins have been selected by the Building Committee of the First Congregational Church of Hyde Park, Mass., of which W. W. Lewis, '89, is clerk, to be their architects for a large new church with a seating capacity of about 700, which will cost about \$50,000. This church will have a complete equipment of Sunday-school classrooms, banquet halls, kitchens, and everything else connected with the work of a large congregation. The firm are just completing a large summer place at Tamworth, N.H., for ex-President Cleveland.—The *Engineering Magazine* for May, 1906, contains the abstract of a paper presented at a recent meeting of the Pacific Coast Railway Club, by G. M. Basford, on "The Development of the Large Locomotive." In this paper the rapid increase in locomotive dimensions and weights during recent years is interestingly discussed:—

This rapid advance in weight and power is too general to be anything but a principle in American locomotive practice, and it is a principle which com-



pels the most careful consideration and deepest thought of those who decide questions of design, as well as those who bear the responsibilities for other improvements in equipment and maintenance facilities, in the advance of which the locomotive now stands. . . . Because of the increasing weight of cars and trains we must have large and powerful locomotives. This fact seems to be sufficiently demonstrated. Whether they are in every respect popular or not, they constitute an economic necessity in present-day conditions. It seems to be altogether improbable that there can ever be a pause in the advancement to more powerful units, and, as long as the country supplies such increasing quantities of commodities to be moved, we cannot go backward in the power to move them.

Mr. Basford brings out a very important point, and one which has not been given sufficient consideration, namely, that the best results cannot be expected by increasing the size of the locomotive without making a corresponding improvement in the conditions under which it is used.—William Lincoln Smith has recently been appointed municipal inspector of wires in the town of Concord, Mass.—O. W. Pickering is now consulting chemist with the Fibaloid Company of Quincy, Mass. His address is 20 Lennox Street, Springfield.—F. W. Ranno is with the Ranno Saddlery Company, 145 South Main Street, Manchester, N.H.—Mr. L. W. Smith presents Master Philip Loring Smith.

1890.

GEORGE L. GILMORE, *Sec.*, Lexington, Mass.

---

In reply to one hundred and fifty notices mailed to the members of the class relative to "Tech night" at the Pop, replies were received from only forty-five. Unfortunately, most of them were regrets.—The class dinner was held at the Algonquin Club, and the following six were present: Atwood, Packard, Mossman, Tripp, Hayden, and Gilmore. After the dinner, in Charlie Hayden's new Pope-Toledo we went to the Pop, where we were joined by Burley and Goodwin. Miss Maltby was present in the gallery.—Atherton Loring has been blessed with a daughter, born May 13.—G. C. Emerson is with the United States Geological Survey, and at present is located in Corbett,

Wyo.—G. T. Voorhees has been in San Francisco since the earthquake. His mail address is now The Engineers' Club, New York.—W. L. Bowker is superintendent of construction with Joseph H. Wallace, C.E., mill architect and hydraulic engineer, with office in New York.—H. P. Spaulding was in Venice during May, goes to France early in June, then to Holland and England, returning the last of July.—C. O. Churchill is now with the Fairbanks Company, 416 Broome Street, New York.—Mr. John O. DeWolf was a member of the Reception Committee of the New England Cotton Manufacturers' Association that held its annual meeting and banquet in Boston the last of April.—A. H. Rogers, who for the past ten years has been in Mexico, but is now located at 71 Broadway, New York, expected to be at the Pop, but owing to a fire in the Silverton Lake Mines, he was obliged to go to Silverton, Col., at once, and will not return before the middle of June.—Mr. S. A. Moss is now at Marysville, Cal.—Rev. George F. Weld, rector of St. John's Episcopal Church of Hingham, who was ill all winter and lost one leg by amputation, returned to Hingham about the middle of April.—Calvin W. Rice has just been elected assistant to the secretary of the Society of Mechanical Engineers, and will doubtless do full justice to the opportunities offered by this important and honorable post.—The following clipping is from the Boston *Herald* of April 17, 1906:—

A notable list of Easter weddings was brilliantly ushered in yesterday afternoon by the marriage of Miss Mary Blanche Linder, of Beacon Street, to Professor Harry M. Goodwin, of the Massachusetts Institute of Technology, at the Arlington Street Church.

The bride, a pretty brunette, was handsomely gowned in white moiré, Milanese lace, and wore a bouquet of bride's roses. The maid of honor was Miss Florence E. Goodwin, sister of the groom, and the best man was Professor George E. Hale, of the Carnegie Observatory, Pasadena, Cal.

The ushers were Messrs. George L. Gilmore, of Lexington, John H. Harwood, of Boston, John F. Linder, brother of the bride, Professor Arthur A. Noyes, Dr. Maurice de K. Thompson, Jr., and Professor George V. Wendell, of the Institute of Technology, Dwight M. Prouty, of Chestnut Hill, and Albert R. Whittier, Jr., of Milton.

The ceremony, which was performed by the Rev. Paul Revere Frothingham, was followed by a small reception by the bride and groom at the Beaconsfield. Mr. and Mrs. Goodwin will reside at 322 Tappan Street, Brookline.

1891.

HOWARD C. FORBES, *Sec.*, 4 State Street, Boston.

This is the fifteenth year since the class of '91 graduated. In all thirty-seven men came together for the different events. The ball game at the Country Club, Brookline, drew 21, the class dinner 31, and the Pop Concert 19. The class met on Monday morning, June 4, at 9.30, at Park Square, and went by special car and connecting barges to the Brookline Country Club. (Bird, Birks, Bowen, H. C. Bradley, J. Campbell, Cunningham, Chase, Damon, Dana, Dart, Dunham, Fiske, Forbes, Fuller, Garrison, Goodwin, Hatch, Highlands, Spooner, Trowbridge, Wason, Young.) Cunningham had gone to the club earlier in the morning, and, when we arrived, the field was ready for the ball game. Fat men's baseball is the regular game with shorter bases, a ball somewhat larger than an ordinary baseball and soft, and short bats. It retains all the interest of baseball, but is free from the smashing-up features. The final arrangement of nines was as follows: "Highballs,"—Goodwin, p; Wason, c; Cunningham, 1 b; Trowbridge, 2 b; Highlands, ss; Young, 3 b; Birks, lf; Dart, cf; Bowen, rf; (J. Campbell, 1 b). "Water Wagons,"—Fiske, p; Spooner, c; Garrison, Capt., 1 b; Chase, 2 b; Forbes, 3 b; Dana, ss; H. C. Bradley, lf; Fuller, rf; Bird, cf; (Damon, rf); scorer, Dunham. The umpiring was done by everybody. The "Highballs" won by a score of 15 runs to 10 runs. This was due to several things. In the first place undue influence was used to secure runs by the "Highballs" through the premium awarded for each run in the form of drink checks. Every man made a run. Wason made four, and Cunningham three. Another thing that contributed to the success of the "Highballs" was the fact that they didn't put in Highlands to pitch sooner. Only at the last innings was Highlands allowed to pitch, and he was rapidly

being knocked out of the box when the game ended. Wason's ability behind the bat to reach everything in sight also contributed to the victory. The "Water Wagons," on the other hand, were really the better nine. Under the guiding influence of their captain, without the stimulation of anticipated "checks" and without undue hilarity, they played like perfect gentlemen, and were rapidly coming as the game was called. Another inning or two undoubtedly would have seen them ahead. The score by innings was as follows:—

	1	2	3	4	5	6	7	8	9	
Highballs . . . . .	4	4	2	0	1	1	2	0	1	= 15
Water Wagons . . . . .	2	0	1	0	0	2	1	1	3	= 10

Three base hits, Wason; two base hits, Wason; left on bases, "Highballs," 8, "Water Wagons," 14; base on balls, Dart (2), Bradley, Bird. The scorer lost count of the errors early in the game. After the ball game, lunch was served at the club. In the afternoon there was tennis by Dana, Goodwin, Wason, and Bird; golf by Birks, Dart, Garrison, Fiske, Forbes, Hatch; and bowls by about everybody else. At seven o'clock came the class dinner at the Algonquin Club, at which the following were present (in the order of sitting): Rooney, Wason, Chase, Bradley, Bird, Cunningham, Fiske, Spooner, Bryant, Bunker, Young, Vaillant, J. Campbell, Dart, Alley, Trowbridge, Dunham, Goodwin, Bowen, Birks, Douglass, Wilder, Wilson, Tyler, Forbes, Garrison, Howland, Hatch, Walker, Dana, Damon. Mr. Garrison's term as president expired by limitation (being the third year in office), and Mr. Cunningham was elected president for the three ensuing years. Several miscellaneous matters were acted upon. The date and price of the class dinners was left to the judgment of the Executive Committee (president and secretary). A motion to raise the class dues to one dollar per year (now fifty cents) was lost,—16, no; 14, yes. The president was directed to appoint a committee of three to consider an appropriate celebration for the twentieth reunion, and to send out a circular suggesting contributions therefor. The average salary was \$4,509; and the number of children, 39. On Tuesday, June 5, the class went to the Pop Concert, "Tech night." The following were there: Alley, Birks,

Bradley, Bryant, Burton, Campbell, Cormier, Damon, Dana, Forbes, Fuller, Garrison, Goodwin, Hall, Kimball, Tappan, Trowbridge, Wilder, Wilson. Dunham, of Kansas City, was the man from the greatest distance. Birks came down from Montreal.

1892.

PROF. WILLIAM A. JOHNSTON, *Sec.*, Mass. Inst. of Technology,  
Boston.

---

The following men were present at the class dinner held at the Copley Square Hotel, Tuesday, June 5: Curtin, Derr, Douglas, Fuller, Hutchinson, Ingraham, Johnson, H. L., Johnston, Locke, Metcalf, Potter, Wendell. The officers elected for the ensuing year: president, Leonard Metcalf; first vice-president, John A. Curtin; second vice-president, J. Scott Parrish; secretary-treasurer, William A. Johnston; assistant secretary-treasurer, Lewis P. Cody. After dinner the party adjourned to the Pop Concert, and were joined by Chase.—The secretary has received a copy of *Printing Art*, of which H. L. Johnson is editor. The number contained several fine examples of process printing.—C. E. Fuller, C. F. Park, and W. A. Johnston were advanced to the grade of Associate Professor of Mechanical Engineering at the meeting of the Executive Committee held in April.

1893.

FREDERIC H. FAY, *Sec.*, 60 City Hall, Boston.

---

The thirteenth anniversary of the graduation of the class was observed on Commencement, June 5, with a programme differing somewhat from that of the last three years. Being unable to obtain our usual quarters at the Brunswick for the spread and dinner, owing to the Convention of the American Medical Association in Boston that week, '93, like most of the other classes, gave its spread in Engineering A. The annual dinner, at the Plaza, was held jointly with our good friends of '98, this in itself proving an agreeable de-

parture from our custom of dining alone. Formal speaking was dispensed with for lack of time, and at the conclusion of the dinner the two classes went to Symphony Hall, and together marched upon the floor at the annual "Tech night" Pop Concert. At the business meeting preceding the dinner, officers were chosen for the ensuing year, as follows: president, Leo W. Pickert; first vice-president, Henry A. Morss; second vice-president, George B. Glidden; secretary-treasurer, Frederic H. Fay; assistant secretary, Grosvenor T. Blood. Pickert and Morss were last year first and second vice-president, respectively, and the secretaries were re-elected. The '93 men in attendance at the celebration were Barnes, Bemis, Blood, W. A. Clapp, Crosby, Dawes, Emery, Fay, F. B. Forbes, Glidden, Keyes, A. L. Kendall, Latham, H. A. Morss, W. B. Page, Pickert, J. H. Reed, Taintor, Tomfohrde, Tucker, and Wilson. Mr. Rand, the popular bursar of the Institute, was our guest. The member present from the greatest distance was James A. Emery, of Birmingham, Ala.—S. H. Brockunier is mining engineer of the United States Brick Company, his address being Kaaterskill Paving Brick Company, Catskill, N.Y.—Edward M. Hagar, for several years manager of the cement department of the Illinois Steel Company, manufacturers of "Universal" Portland cement, has recently become president of the Universal Portland Cement Company, 1057 The Rookery, Chicago.—Harry N. Latey has recently been elected a member of the American Society of Civil Engineers. In the fall of 1893 Latey entered the employ of the Westinghouse Electric and Manufacturing Company at Pittsburgh, and the following year was sent to the company's St. Louis office. From 1895 to 1898, as engineer of that office, he had charge of all car equipment work done in the various car-shops in St. Louis, as well as the installation of the electrical apparatus in the power plants of the Lindell Railway, Terminal Railway, Ely-Walker Company, and other plants. For the next two years he was in the employ of the Manhattan Railway Company, New York, first as principal assistant engineer to George H. Pegram, consulting engineer, in the design of civil and electric engineering work, and later as electrical constructor engaged upon the actual equipment of the road. From January, 1901, to No-



vember, 1904, Latey was principal assistant engineer on the electrical equipment of the New York Subway, having actual charge of all electrical design and construction until the road was put into operation. Upon the latter date he was made electrical engineer of the Subway Division of the Interborough Rapid Transit Company, and at present is in charge of the entire system in that capacity. Latey's address is Park Row Building, New York City.—For the third successive year the 1906 "Tech night" Pop Concert was ably and successfully managed by an alumni committee, headed by L. W. Pickert, '93, as chairman.—Charles M. Spofford, professor of civil engineering at the Brooklyn Polytechnic Institute, is in Boston for the summer, engaged in consulting bridge engineering for the Boston Elevated Railway and the city of Boston.

1895.

H. K. BARROWS, *Sec.*, 6 Beacon Street, Boston, Mass.

---

The annual dinner of the class was held on June 5 at the American House, there being present eighteen men, as follows: Barrows, F. A. Bourne, Churchill, E. H. Clapp, G. Clapp, S. S. Clark, Defren, Eveleth, Hall, Hurd, Loring, Lothrop, Miller, Newell, C. H. Parker, Rockwell, E. A. Tucker, W. S. Williams. A business meeting at 6 P.M. preceded the dinner, with President E. L. Hurd in the chair. *It was unanimously voted* to amend Article I. of the constitution so as to make eligible to class membership any student who has appeared upon the records of the Institute as taking one or more subjects with the class. A notice of this proposed change is to be sent to all members (as thus re-defined), to obtain an up-to-date list. It was further voted that at the beginning of every year the secretary-treasurer shall request each member to forward one dollar (\$1), to be considered as "annual dues." The class voted to contribute one or more panels toward the further restoration of the Huntington Hall frieze, at a cost of approximately one hundred dollars (\$100). A nominating committee of three was appointed by the chair, and they reported the following nominations: president,

E. A. Tucker; first vice-president, G. A. Rockwell; second vice-president, A. C. Jones; secretary-treasurer, H. K. Barrows. *It was voted* to empower the secretary-treasurer to cast one ballot in favor of the above list, and they were accordingly declared elected. After a vote of hearty thanks to the retiring Executive Committee, President E. L. Hurd, and Secretary-treasurer W. T. Hall, the class adjourned to the dinner. This was a most enjoyable affair, and all seemed to find numerous topics of mutual interest. After a brief rehearsal of '95's now famous siren yell, the class adjourned in a body to Symphony Hall, and participated in the usual exercises and festivities of "Tech night" at the Pops.—Azel Ames, Jr., has been appointed signal engineer of the electric zone of the New York Central & Hudson River Railroad. His address is now Army and Navy Club, New York City.—A. L. DeJonge reports change of address to 15 Smith Terrace, Stapleton, Staten Island, N.Y.—T. H. Wiggin (address 299 Broadway, New York) writes as follows to the secretary:—

Autobiography is distasteful to the ordinary man, especially to the nomadic municipal engineer who follows "the circuit," and has his history and antecedents to write up for every contemplated change; but as a critic of class spirit, I acknowledge the corn.

First it was Metropolitan Water Works of Massachusetts, then it was proposed additional water for New York, then it was filters for Pittsburg, and now it is, we hope, really and truly more water for New York. There were sundry minor matters to fill the intermissions when the play stopped, but the municipal nomad turns up on each new big job, and '95 I. is always well represented. To put it a little more statistically, T. H. W., 1895 I., resigned March 1 the position of principal division engineer in charge, under Mr. Morris Knowles, '91, chief engineer of design and construction of Pittsburgh Filtration Plant, to become senior designing engineer in the Board of Water Supply of New York City, reporting to Mr. A. D. Flinn, department engineer. Reasons, better \$ appreciation of service.

—A. Geiger, Jr., is now at 87 Milk Street, Boston, Mass.—W. F. Patten is now with the Chicago Telephone Company, Chicago, Ill. He writes as follows to the secretary:—

You are a great nuisance, but nevertheless I will answer you. In fact, I had started to do so after getting your first letter, but have been very busy in my new position. I hope the following will appease you:—

1. Not married.
2. Politics indefinite.
3. No church sympathies.
4. Member of Savin Hill Yacht Club, and expect to be a member of Illinois Athletic Club.

I entered the employ of the American Bell Telephone Company (now American Telephone & Telegraph Company) in July, 1895, taking student course of construction, and spent six months in it. This covered observations and some work in all departments of telephone company. Dug post-holes (part of one hole), climbed poles, and operated at switchboard. Entered engineering department of American Telephone & Telegraph Company January, 1896, where I stayed until April 9, 1906. The work covered general telephone engineering, special studies, and consulting engineering for the licensee companies. In connection with this I travelled to about thirty States, being away a total of perhaps a year. Spent three months in California, most of it in San Francisco, and planned much of the plant that has just gone up in smoke. In 1900 spent a month on a vacation trip to Jamaica that I enjoyed very greatly.

My principal amusement was yachting, and have taken about thirteen cruises, covering the coast from Newport to St. John, N.S., in a 27-foot cat. Have sold my boat since coming out here, and bought an automobile.

I entered the employ of the Chicago Telephone Company April 9, 1906, as first assistant engineer, so cannot tell you much about this new work yet.

If you must have something more than this, will be glad to answer some questions, but could not promise to answer all.

—Gerard Swope has also moved to Chicago, and is with the Western Electric Company at 259 South Clinton Street.—H. D. Jackson has moved his office to 4 State Street, Boston. His specialty is consulting electrical engineer for street railways, electric light plants, and electrolysis of water and gas pipes. At present he is trying to convince the town of Wrentham that they need an electric light plant, and also the town of Danvers and Peabody that their plants need a thorough overhauling.—P. M. Churchill has opened an office at 6

Beacon Street, Boston, to carry on a general engineering business, specializing in the development of water powers, irrigation projects, street railways, topographic and hydrographic surveys. He left the War Department in 1902, and entered the Hydrographic Branch of the Geological Survey. He was located at Kingston, N.Y., until the next spring, when he was transferred to the Reclamation Service. On this work he was first in charge of surveys in connection with the Shoshone irrigation project. After some time in the Denver office of the Reclamation Service he went to North Dakota on reconnaissance connected with irrigation projects there and investigating the utilizing of lignite for fuel. During the season of 1905 he was in charge of the Williston district projects, which are just about beginning construction at this time. He resigned his position to go into private work in February of this year.—In starting in on his duties for the coming year, the secretary wishes to appeal to all members of the class of '95 (keeping in mind what that now includes) to help in making our section of the REVIEW one of the best and most complete of the various classes. He will do his best to bring this about, but it will not be possible without the hearty co-operation of all. Be on the lookout for items of class news, especially regarding men who are far away and not closely in touch with Institute affairs. Don't bother to write finished statements, but send in a rough draft. Use lead pencil and postal card, if you please, but send in something once in a while! When you come to Boston, give the secretary five minutes of your time, and tell him the news.

1896.

EDWARD S. MANSFIELD, *Sec.*, 70 State Street, Boston.

---

The '96 "Decennial" was held at Gilman's camp, Ipswich, Mass., from Friday, June 1, to Monday, June 4, about noon, on which day the surviving members of the class sorrowfully broke camp and wended their way back to more conventional civilization. It is needless to say that '96 did itself proud in this her decennial celebration, and the class spirit waxed strong and enthusiastic, and it

is hoped that the effect may be felt for many years to come. A complete history of the celebration will be included in the decennial catalogue to be published later. The following men were present during the whole or a part of the time: H. S. Baldwin, H. W. Brown, Fisk, F. W. Fuller, Gilman, Grush, Hersey, Knight, Locke, Mac-lachlan, Mansfield, Partridge, Raynolds, Rockwell, Root, Tappan, Thompson, Wise. On Friday evening, June 1, at the reception to the Senior Class, a delegation from '96 presented a stunt in the form of a gift to '06. This consisted of an appropriately decorated casket containing a globe of the earth, a bar of gold, a house, and an automobile. The globe, a symbol of their field of labor, the bar of gold, a symbol of wealth, the house, symbolic of home and happiness, and the automobile, representing pleasure and earthly enjoyment, all having been in the custody of the class of '96 for ten years, were bequeathed to '06 as their rightful heritage, for their use and behoof forever. The class meeting and dinner was held at the Hotel Nottingham on Tuesday evening, June 5, at 6.30 P.M. The class officers were re-elected for the ensuing year. The following men, thirty-eight in number, were present at the dinner: H. S. Baldwin, Barker, Batchelder, Brackett, Callan, R. A. Davis, J. M. Driscoll, Fisk, Frank, F. W. Fuller, Gilman, Grush, Hall, Harkness, Hatch, H. R. Hedge, W. R. Hedge, Hersey, Hewett, Huey, Hultman, Jackson, Knight, Leland, Lythgoe, Mac-lachlan, Mansfield, Melliush, Nevin, Partridge, Pingree, Rockwell, Root, Sanderson, Sjostrom, Thompson, Tucker, Wise. After the dinner the men marched up to the "Pop" Concert, where they were joined by others of the class, and where the decennial celebration of the class of '96 gloriously ended.—Charles P. Moat was married to Miss Helen Ferguson, of Burlington, Vt., on Saturday, May 5.—R. A. Davis and Nevin both admit that they are engaged, although we have as yet received no further particulars.—On Dec. 24, 1905, Helen Farrar Hyde came into the home of C. G. Hyde for a long visit: we have, however, but just received this information. '96 men will please notify the secretary of such important events by the next post.—The Las Vegas (N.M.) *Daily Optic*, under date of March 27, 1906, published the following sketch of Raynolds, who had won a political fight for re-ap-

pointment to the position of Secretary of the Territory of New Mexico:—

J. W. Reynolds was born in Pueblo, Col., in 1873. He moved with his parents to Las Vegas in 1876, receiving his early education in the schools of this city. In 1891 he entered the Massachusetts Institute of Technology, taking the course in Mining Engineering, and graduating in 1896. In December of that year he married Miss Baum, of Omaha. In 1898 he accepted a position in the First National Bank in this city. Upon the appointment of George H. Wallace as Secretary of the Territory, Mr. Reynolds went to Santa Fé to accept the office of Assistant Secretary. Upon the death of Secretary Wallace in 1901 Mr. Reynolds was appointed by President McKinley to fill out the unexpired term. In December, 1901, he was appointed by President Roosevelt for a term of four years, and in December, 1905, he was reappointed by President Roosevelt, making his third appointment to that office.

In politics Mr. Reynolds is a consistent Republican who is devoted to the principles and success of his party. Though still a young man, he combines with the strength and vigor of youth the ability and sagacity of a man of years. He is broad-minded, of a liberal education, has travelled extensively in this country and Europe, and possesses excellent business habits and methods.

He has thoroughly systematized the work of his important office, and has established it on a practical business basis.

Mr. Reynolds is of unimpeached integrity, is courageous in the performance of his duty, and is highly esteemed throughout the territory.

—G. C. Hall, formerly living at 59th Street and 11th Avenue, New York City, has changed his address to 35 Brewster Street, Cambridge, Mass.—J. H. Pillsbury, formerly in United States Engineer's Office at Jacksonville, Fla., is now with the Grand Trunk Pacific Railway at Prince Rupert, B.C.—Mortimer C. Priest has associated himself with the Boston *American*, 80 Summer Street, Boston, home address 389 Harvard Street, Brookline, Mass.—Carl E. Van Jungendorf, formerly of New York City, died the latter part of this spring. The exact date has not reached us.



1897.

JOHN A. COLLINS, JR., *Sec.*, 74 Saunders Street, Lawrence, Mass.

---

Several informal dinners were held during the month of May at the Technology Club in connection with the solicitation of contributions to the Technology Fund. Among those who attended were Hopkins, Fuller, Blood, Humphreys, Breed, Loveland, Norris, Bradlee, and Pike. These men formed themselves into a special committee to do what they could before June 1. The result was quite gratifying, the total amount pledged by '97 men being about \$7,000. This represents the contributions of seventy men.—The members of the class will regret to learn of an accident happening to Jay E. Tone, by which his left hand was severely injured, that member being caught in a revolving mill that was grinding vanilla beans.—William K. Fairbanks, formerly assistant superintendent and purchasing agent of the Bigelow Carpet Company, Lowell, has been made agent of the same concern. Mr. Lyon, the former agent, goes to Lawrence as agent of the Wood Worsted Mill.—Dr. Mortimer Frank, Course I., now a prominent physician in Chicago, came on to Boston to the meeting of the American Medical Association. On Tuesday afternoon he read a paper, the subject being "Normal and Sub-normal Color Vision in its Relation to Distant Signal Lights."—The annual class dinner was held on Tuesday evening, June 5, at the Hotel Oxford. The following men were present: Hopkins, Fuller, Hosford, Eames, Bliss, Breed, Collins, Carter, and Fairbanks. A most enjoyable time was spent. After the dinner the men proceeded to the Pops. Here Edmands and Loveland joined the crowd, and '97 was represented in the doings of the evening as well as eleven members could do it.

1898.

PROF. C.-E. A. WINSLOW, *Sec.*, Hotel Oxford, Boston.

---

The class of '98 held its eighth annual celebration on Commencement Day, June 5. The plan of holding the afternoon spreads in

the Engineering Building proved a great success, and '98, '93, '05 and other classes enjoyed a very pleasant two hours. At 6.30 '98 adjourned to the Plaza for its annual meeting and dinner. The present Class Committee, Coburn, Godfrey, and Winslow, was continued for another year. At the dinner the following members of the class were present: Bigelow (honorary member), Humphrey, Godfrey, Coburn, Putnam, Wright, Dawes, Dodd, Butcher, Lambert, Morgan, Goodrich, Edgerley, Babson, Torrey, Russ, Robinson, Bennink, Clifford, Curtis, Danforth, McIntyre, Perry, and Winslow. Mr. F. P. Fish, of the Executive Committee of the Corporation, was the guest of the class.—Anthony writes as follows:—

You know I have been away for five years, and it is going on three years since I have been East. Perhaps it would be permissible to give you a little of my history during that time. Four years ago I wandered into the offices of the American Radiator Company in Chicago, and applied for a position. After a time I was successful in securing an opportunity, and was sent to one of our large plants in Buffalo to learn the business of manufacturing radiators, and for nearly two years I was an ordinary laborer in all the various departments of our great business. It was hard, fierce work, but it paid in the practical knowledge gained by having to earn my living as a moulder, core-maker, melter, machinist, pattern-maker, etc.

Since then I have served as assistant superintendent of our plant in St. Louis, Mo., then as superintendent of our steel plant in Springfield, Ohio, and now I am manager of one of our largest plants located here in Titusville, Pa.

Last fall I deserted the ranks of the Bachelors' Club, of which I was a charter member, and married a girl from the Golden West, and since then I have been gradually developing into a fairly well-civilized member of society.

A canvass of salaries and incomes from professional services made at the class dinner showed that the incomes of sixteen men ranged between \$900 and \$6,000, and averaged \$2,660.—Dawes has been elected a director of the Massachusetts Electrical Contractors' Association.—Perry has a son, Edmund Williams, born Jan. 11, 1905.—Nesbit is chief clerk and law clerk in the solicitor's office of the

Department of Commerce and Labor, Washington, D.C.—Strickland has been in the construction department of the chief engineer of the Susquehanna Central Railway Company, in charge of location from Clearfield, Pa., to Lock Haven. He is now in the engineering department, in charge of all surveys, etc. His address remains care of J. G. White & Co., 43 Exchange Place, New York.—B. H. Johnson has moved from Lynn to 15 Summer Street, Hyde Park.—Shaw's present address is 32 Oakland Street, Newburyport.—Tallmadge has recently been appointed associate professor of architecture in the Armour Institute of Technology. A paper by him on the Roman Forum in the Light of Recent Excavations was published in the *Western Architect* for July.—Sullivan became a Master Mason, May 1.—Milliken is studying manual training at the Teachers' College of Columbia.—W. A. Robinson, Jr., was taken into the firm of W. A. Robinson & Co. as a partner March 20, 1906.—Kellogg announces the birth of a son, Kenneth Avery, Nov. 2, 1905.—Wesson has moved to 545 School Street, Lowell.—Newton was married Oct. 10, 1905. He is treasurer of the Newton Paper Company, Holyoke, Mass.—Huntington is president of the Racquette Foundry and Supply Company of Potsdam, N.Y., manufacturers of iron and brass castings and machinery.—Jacoby has a son, Gordon Campbell, born Sept. 6, 1905.—A. L. Davis is now manager of the crucible melting department of the Crucible Steel Company of America at their Park Works. His address is 508 St. Clair Street, Pittsburg, Pa.—Philbrick is now associated with Mr. Robert A. Foster at Spokane, and American Falls, Ida.—Learned was married Oct. 7, 1905. His address is 39 Benton Road, Somerville.—C. E. Lord has been elected president of the Bullock Electric Company of Ohio, though still acting as patent attorney for the company. A son, Charles Carroll, was born March 21, 1906.—Higgins was married in June, 1905, to Mary Lee Blaisdell, of Clinton, Conn. He is now instructor in science in the State Normal School, Danbury, Conn. Ginn & Co. published a "First Science Book" by him in 1905.—W. A. Wilder has returned from Washington, and his present address is 8 Hotel Dale, Roxbury, Mass.—Shook is now general manager of the Central Iron Company at Tuscaloosa, Ala.—Dr. S. F. Jones's present

address is 125 East 71st Street, New York.—Muhlig announces the birth of a son, John Robert, born July 5, 1905. His address is 339 North Franklin Street, West Chester, Pa.—Blossom's new address is 419 East 6th Street, Salt Lake City.—Mills is now living at 5343 De Lancey Street, Philadelphia. His business address is 627 Wither-spoon Building.—Sherman has been promoted from the position of assistant engineer to be division engineer in charge of the office of the Charles River Basin Commission.

1899.

HERVEY J. SKINNER, *Sec.*, 93 Broad Street, Boston.

---

The annual dinner and meeting of the class was held at the University Club on the evening of Commencement, June 5. The following men were present: Barry, Blake, Eaton, Hamilton, Kingman, Loud, Sheak, Sherrill, Skinner, Stebbins, Swan, Tufts, Whitney, and Witherell. The resignation of M. S. Sherrill as secretary was presented, and accepted with the regrets of the class. H. J. Skinner was elected as his successor. R. W. Stebbins, E. R. Sheak, and M. S. Sherrill were elected to the Advisory Council for the coming year. After the dinner the class adjourned to Symphony Hall, and joined in the usual celebration of "Tech night" at the Pops. At the hall the numbers were increased by A. H. Brown, Emerson, Harrison, M. S. Richmond, and Rickards.—Edward Johnson, Jr., has recently accepted a position as engineer and superintendent of the San Diego Flume Company, San Diego, Cal.—It is with deep regret that we announce the death of Estelle Williams Mork, wife of Harry S. Mork, on April 25, 1906. Mrs. Mork leaves besides her husband a baby girl, Miss Marjorie Williams Mork. Mr. Mork has the deep sympathy of the entire class.—Arthur I. Kendall, Ph.D., recently addressed the class in sanitary science and public health at the Institute on the Care of the Personal Health in the Tropics. Dr. Kendall is acting chief of the Board of Health Laboratory, Isthmian Canal Zone.—William Scott Matheson and

Miss Sarah MacDonald were married on May 16, 1906, at Boston. After a short wedding trip to Montreal they went to Nevada, where Matheson will try his fortune.—Guy Magee, Jr., is in China, doing engineering work on the Imperial Railroad of China.—W. C. Phalen has been awarded one of the Cabot medals as a reward for gymnasium work. Phalen is in Washington with the Geological Survey.—E. H. Hammond is now associated in business in Norwich, Conn., under the firm name of Hammond, Boynton Paint & Chemical Co.—R. W. Stebbins is now located in Malden, where he is engaged in construction work for the Malden & Melrose Gas Light Company.—C. Gardner Barry is working in the Pennsylvania Railroad Tunnels now being built under the North River. He writes that the work is intensely interesting, and that he has only experienced two slight attacks of “the bends,” which result from working under air pressure.—W. A. Kingman has returned to the vicinity of Boston, and has taken a position as assistant chemist for the Dennison Manufacturing Company at South Framingham.—John W. Woollett was married to Miss Constance Somers at Andover, Mass., April 25, 1906. They will make their home in Troy, N.Y., where Mr. Woollett is engaged as an architect in partnership with his brother.—F. A. Watkins, who is with the Western Electric Company, has recently been transferred from Chicago to New York.

1900.

RICHARD WASTCOAT, *Sec.*, Dedham, Mass.

---

At the reception to the graduating class held Friday evening, June 1, Smith, Stearns, and Wastcoat had the pleasure of congratulating Leeds on getting his degree. Leeds (IV.) left at the end of the third year, entered West Point, and graduated one of the honor men of his class, and now ranks as first lieutenant in the Engineering Corps of the army. This year he came back, and completed his final year in Course I., graduating with '06.—In common with the other classes we held our annual dinner on Tuesday evening, June 5. This year

we met at the Hotel Victoria, corner Newbury and Dartmouth Streets, and talk about your dinners, the frozen pudding (Charles had a double order) was worth the price of admission! Thirteen of the fellows showed up, and Course I. headed the list with Charles, Jouett, Russell, Stearns, Wastcoat; Course II. had Burnham, Keay, Walworth; Course III., Emery; Course IV., Beekman, Kattelle; Course VIII., Brock; and Course XIII., Wentworth. Immediately after the dinner the meeting was called to order, and Jouett was chosen chairman. The report of the last meeting was read, and the report of the Nominating Committee on officers showed the reelection of Wastcoat as secretary and Stearns as vice-secretary, with 50 votes each, and of Osgood, Walworth, and Draper as members of the Executive Committee, with 34, 24, and 24 votes, respectively. A new nominating committee, consisting of Wentworth, Russell, and Charles, was chosen to nominate officers for next year. Then the class adjourned to the Pops. It was the same old Pops, only noisier than last year, and we added our portion, coupled with a "balloon ascension"; and Osgood, Learnard, Graff, Weeden, Hapgood, and Glover were added to our numbers. It seemed good to get together again, especially as it was the first appearance of some of the fellows since graduation. Here's hoping we may see more present next year.—Only two weddings to report this time. Lewis Arthur Miller was married to Miss Bess Anderson Lambert Monday evening, May 21, at six o'clock, in the First Baptist Church at Lambertville, N.J. Another Course I. man whose troubles are just beginning. And Cayvan (VI.), the same old boy as ever, writes as follows:—

L. L. Cayvan married Anna E. Place, of Kansas, last night (March 30). Yes, I went and did it, boys, last night, and my advice to all the bachelors is "to go thou and do likewise." I have been on the road as assistant manager of the operating department of the National Biscuit Company for some time, and in that capacity stay ten days or three months in a town (where we have a plant), correcting the errors of each factory. The job was lonely: it won't be any more, for my wife goes with me from now on. No more news at present, as I haven't seen a Tech man for a long while. With best wishes to all the boys of 1900, I am always L. L. Cayvan of 1900.



May we offer congratulations to both Miller and Cayvan, and trust that they will uphold the reputation of the other married men of the class?—We were all glad to see Jouett (I.) present at the dinner, as he is just recovering from a long siege of illness. He has been with the New York Central in New York City since graduation. Last fall he contracted pneumonia, and was seriously ill for a number of months, which necessitated his giving up work and returning home. He is now on the high road to recovery, and is looking in fine condition. He is going to put in some time at the shore and mountains before taking up work again, in order to get his strength back.—Wentworth (XIII.), who has been in Washington, D.C., the past few years, is now down at the Fore River Ship and Engine Works at Quincy, inspecting work being done for the government. Wentworth says it seems good to get back to Boston again. He lays claim to having the honor of being the father of the “class boy.” So it is up to the married men to show their hands.—Perry (II.), who is now out in Grand Rapids with the Macey Company, writes:—

As for myself, I feel younger than ever, even though the years since we left Tech are six. I am about to sever my connection with the Macey Company, and take a new position as business manager of the Board of Education in this city. The new city charter has provided for an entire reorganization of this board on a business basis. I have been asked to assume charge of this reorganization, and also of the construction of new buildings in progress and the maintenance of old buildings. It isn't safe to predict how many gray hairs I shall have when the job is completed. Mrs. Perry is well, and we are looking forward to some good canoeing trips in the northern part of this State. [The Secretary cuts out the next sentence, as it is a reflection on himself.] Please remember me to the fellows of 1900 at the annual banquet, and keep a good hand-shake for yourself.

—George M. Holbrook (V.) has been appointed superintendent of the lard refinery of Armour & Co. at Fort Worth, Tex.—Russell (I.) is with the Charles River Dam Commission for the summer.—Keay (II.) delivered a lecture in May before the Society of Arts on “Tests with a Dynamometer Car” with which he had been connected

on the Boston & Maine Railroad.—Bowditch (I.) reports the arrival of a bouncing boy, now about four months old. Bowditch says he sleeps mostly during office hours nowadays.—N. J. Neall (VI.) has opened an office at 12 Pearl Street, Boston, as consulting electrical engineer, making a specialty of lightning protective apparatus, high tension alternating current installations, and on the rehabilitation of existing electrical plants. The last few weeks Neall has been taking in conventions of electrical societies in Chicago and Atlantic City.—Raymond D. Borden is located in Fall River, Mass., and is in business for himself, handling cotton yarns, mills bandings, tubular braids, spool tapes, and cotton rope.—Price (IV.) has been transferred from New York to the Structural Department, Pencoyd Drawing Room, American Bridge Company, and he and Mrs. Price are at home at 427 Roxborough Avenue, Philadelphia.—Stearns (I.) sailed for Europe the first of July for a ten weeks' trip, and expects to tour England in a motor car for a part of the time.—William I. Wyman, of the United States Patent Office, is to take a trip abroad this summer, visiting England, France, Germany, and Switzerland.—Harry Leslie Walker announced the removal of his offices July 1, to 1721 Chandler Building, Atlanta, Ga.—The University Council of Columbia University, New York, has just awarded a fellowship of the value of \$650 to Francis C. Lincoln, of New York City.

1901.

EDWARD B. BELCHER, *Sec.*, Malden, Mass.

---

The secretary regrets that unavoidable absence from Boston caused the class news for the last issue to be greatly neglected, and hopes that members of the class will be of more assistance in the future in furnishing items of interest concerning themselves or their classmates. So many men are leaving Boston that it is difficult to get information of interest to put in this space. Among our own classmates we have lost two of the hardest workers for the welfare of the class: Ellis F. Lawrence and Leonard P. Wood have left to

take more lucrative positions, Mr. Lawrence going to San Francisco and Mr. Wood to New York.—Robbins (XIII.), who has been connected with some of the leading automobile concerns, is now in the employ of the H. H. Franklin Company, Syracuse, N.Y., as designer.—Catlan (V.) is at present with the General Electric Company at Lynn, Mass.—Allen (II.) has left the Charles Holmes Machine Company, and is connected with the B. F. Sturtevant Company, Hyde Park, Mass.—Newman L. Danforth, of Buffalo, was married in June to Miss Theodora White Clapp, of Boston.

1902.

FREDERICK H. HUNTER, *Sec.*, 49 Federal Street, Boston.

The annual meeting and dinner of the class was held at Hotel Plaza, Boston, on Tuesday, June 5, 1906. There were present Nickerson, Hooker, Gardner, S. A., Jr., Whitney, R. F., Wemyss, Vaughan, Fisher, Morrill, Millar, Hunter, Davis, H. H., Thurston, Boardman, Marvin, Ritchie, Westcott, Whittet, Stillings. In the absence of the president and secretary, Hooker presided and Nickerson served as secretary.—The resignation of Kellogg as secretary was read, and accepted with regret. Greetings were sent to him at El Paso by wire, and thanks for the good work he has done for the class were adopted by rising vote. President C. G. Mixer and Vice-Presidents Hooker and Gardner were re-elected. Hunter was chosen secretary, with Nickerson assistant secretary. A poll of those present showed an average salary of \$1,343, with \$2,500 as maximum and \$900 as minimum.—After the dinner the class joined with '98 and '03 in cheering and singing the Stein Song, and then adjourned to the Pops. Here arrived, with confetti and "ticker tape" provided by the thoughtful, '02 speedily became, in spite of small numbers, the most energetic band in Symphony Hall, and Stillings drove the band-wagon. Collier, Upham, Sears, Crowell, A. W., and Lewis joined the crowd at the hall, and did their share to keep things moving.—Most of the news that has come to the secretary of late has related to weddings. If these keep on at the present rate, most

of our bachelors will soon be thoroughly domesticated.—P. R. Whitney married Miss Helen Reed Jones, of Brookline, Mass., on April 17.—Allyn was married on the same day to Miss Annie Mae Pinkham, of Haverhill, Mass.—Sherman was married on April 25 to Miss Adaline M. Swift, of Belmont, Mass. They are living at 35 Harvard Avenue, Allston.—Stover's wedding to Miss Elma A. Brigham was held in the Park Avenue Church, Arlington Heights, on the evening of June 5. Mr. and Mrs. Stover will make their home on Appleton Street, Arlington Heights.—Williston, on June 6, married Miss Elva Inez Shattuck, of Somerville. They will reside at 26 Warren Street, Somerville, after a wedding trip.—Before this reaches the members of the class Clyde Fruit will also be among the Benedicks. Cards are out for his marriage to Miss Winifred Alice Smith, at Wheaton, Ill. They will take up their residence in Wheaton, where they will be at home at 329 Union Street after September 1.—Less romantic affairs concerning members of the class are noted as follows: Fisher has moved to a new address, 54 Battery-march Street, Boston. He is local manager for the M. B. Foster Electric Company.—Marvin is with the Holtzer Cabot Company, Brookline, Mass.—C. A. Sawyer, Jr., is at present located in Greensboro, N.C.—Eames is at Sandy Hill, N.J.—Fish is in New York at 25 Broad Street, Room 925.—F. H. Reed has been transferred by the American Telephone & Telegraph Company to New York. His address there is Technology Club.—Pember has left the office of Green & Wickes in Buffalo, and is now with Townsend & Fleming, 1326 Prudential Building, in the same city. His home is 715 Richmond Avenue.—Bertram B. W. Greene, who is now an owner of a sugar estate in Aguirre Central, Porto Rico, published a very interesting letter on Porto Rico, its government, etc., in the *Boston Transcript* of April 4, 1906.—Your new secretary regrets that, owing to the short time between the class meeting and the arrival of the printer's devil, he has not had time to collect more news. He hopes that every member will co-operate in keeping our records up to date by sending in any items of interest about himself or others that he may come across.

1903.

W. H. ADAMS, *Sec.*, Polytechnic Institute, Brooklyn, N.Y.

---

The following changes of address and occupation have been brought to the secretary's attention since the register was published in March: W. C. Avery, 1 Shawmut Park, Newton Upper Falls, Mass., is draughtsman for the Gamewell Fire Alarm Telegraph Company.—Cheney, 878 South Halsted Street, Chicago, Ill., is with Burley & Tyrrell, wholesale crockery and glass ware.—C. B. Cox, P.O. Box, 834, North Yakima, Wash., is an assistant engineer on the Reclamation Service of the United States Geological Survey.—Eaton, Technology Chambers, Boston, is an electrical engineer with the Westinghouse Electric and Manufacturing Company, and is in the erecting department.—Field, 158 Hicks Street, Brooklyn, N.Y., is in the sales department of the Sullivan Machinery Company.—Hayden is with the Bureau of Public Works at Manila, P.I.—Howell, Jacksonville, Fla., is a gas inspector for the Jacksonville Terminal Company.—Lyon, 806 Security Building, Chicago, Ill., is agent in the oil engine department for the De La Vergne Machine Company.—S. G. Porter, La Junta, Col., is a locating engineer for the Holly & Swink Railroad.—Raymond is now at 309 Lumber Exchange Building, Portland, Ore.—Regan is a teacher in the Charlestown High School in Charlestown, Mass.—Ricker, 6 Bigelow Street, Quincy, Mass., is with E. Ricker, Son & Co., granite contractors.—Seyms, York, Pa., is superintendent for A. B. Farquhar Company.—About the middle of May the secretary made a flying trip to Cleveland, Ohio, and while there he looked up Ball. He had just returned from his wedding trip, and was getting settled.—In addition to Ball, Aldrich was married on June 14 to Miss Belle Greenough, of Boston. He has left the Institute, and gone into the gas engine business in Boston.—The secretary has heard from Newman, who wrote that he and his wife were coming East for a vacation, the earthquake having upset his plans.—Lounsbury has gone to Superior, Wis., to take charge of the laboratory in the filtration plant there.

1904.

CURRIER LANG, *Sec.*, Michigan Central Depot, Detroit, Mich.

---

The principal items of news this time concern the annual dinner, which was very successful and very good for the soul, and gave all our members a new tie to bind them to the class of 1904, inasmuch as one more common possession will strengthen the bond between any body of men. What we all gained was merely an annual custom begun by Dr. Pritchett, and observed by each of the members present at the dinner,—the custom of drinking from the Class Day loving-cup a toast “To the Institute.” The dinner had been finished, and the whole company had just finished “Prexy for Aye,” when a waiter appeared, and set down the loving-cup, covered with dew, before Dr. Pritchett. The President’s remarks in proposing the toast were about as follows:—

Boys, you gave me this cup two years ago, at a time when such a token of confidence meant a great deal to me, and gave me new courage. At the time my emotions overcame my voice, and I could not thank you properly, but to-night I have brought the cup, and I wish you to have it each year at your annual dinner, and drink from it this toast: “To the Institute: may she be ever sincere and sturdy and true to her ideals, and may her sons be ever sincere and loyal and never afraid to stand up for what they think is right, whether it is popular or not.”

The cup was then passed around the table, each man standing as he drank the toast. No speeches were made at the dinner, and no business was transacted. Charlie Homer acted as toastmaster, and kept things moving. All the old songs were sung in company with 1905, and the old cheers startled the neighborhood. The presence of two classes at the dinner added to the interest and noise. About thirty-five members of 1905 were present, and thirty of 1904. At the spread in Engineering A, before the dinner, 1905 was also allied with us, and did much to help along the good feeling. The celebration at the Pops was about the same as usual, with 1906 up in front, making just as much noise as 1904 did two years ago. No further claims were made at the dinner for the loving-cup that is to be pre-



sented to the first son and heir of the class whose father was married after Class Day, and, unless claims are presented very shortly, the cup will go to the son of J. L. Hecht, born Dec. 15, 1905. The general opinion in regard to the money in the class treasury seems to be that it is not enough to worry about. At the dinner the secretary gave each man a slip of paper, and asked him to write down any class news that was of interest, and the following choice bits of information were received as a result: "E. B. Rich has just obtained a position with the J. G. White Company of New York. He has been with the Swan Electric Company of Boston. He is too modest to say this himself, so I am helping him out. Phinney."—"We understand from good authority that Trip (II.), who is with the Walworth Manufacturing Company on Federal Street, has recently received another raise. He is now on time at breakfast every morning. Also Mr. R. M. Phinney, who is with the Swan Electric Company on Pearl Street, is in the same boat. E. B. Rich."—"E. B. Rich has received no raise this year, so sleeps late every morning, and has no time for breakfast before going to work, thus saving money. Tripp."—"I do not consider it modest to write about myself, and, as I have nothing good to say of my friends, I will not write anything more, but just sign my name as a member of the class of '04." And then he forgot to sign it."—"P. S. Sweetser is assistant superintendent of the street railroad in Paducah, Ky. J. A. Haraden."—"W. Burns. Still a hot sport."—"Niles and Gill, '04, have accepted positions in the engineering department of the American Telephone & Telegraph Company, Boston, Mass. Guy W. Eastman, '04, is to be instructor in physics at M. I. T."—"With Boston Rubber Shoe Company in Chemical Department, rooming with M. H. Clark, '03. Am not married or engaged (June 5). Charles R. Haynes."—"E. F. Parker, Jr., will be married June 12, 1906, to Miss Tuttle, of Reading, Mass. C. H. Stebbins will be married June 25, 1906, to Miss Bradford, of Reading. Not for mine on marriage yet. H. W. Stevens."—"From hearsay, Arthur C. Downes is engaged to a young lady in Oberlin, Ohio. Marriage in September. N.B. Please investigate."—"Am going to Iowa City in July to be first assistant bacteriologist to the Iowa State

Board of Health and lecturer on hygiene at the University of Iowa. Selskar Gunn, '04."—"Strange to say, I got my degree to-day, but am still a '04 man. Robert Faulkner is in Versailles, Penn., with Walter Hadley. Moses Brown went to Michigan to survey for Sawyer, Tech '02, on new property. John W. Shaw is surveying for the Grand Trunk Pacific Railroad in New Brunswick. Ralph Hayden, '04."—"Ask H. W. Stevens what the speed limit is. H. S. Kendall."—"Gene Russell, Course I., is at New Haven, Conn., with the New York Central Lines. E. F. Parker, Jr."—The secretary has just lately received a note from the Institute saying that a newspaper has chronicled the death of Gyula B. Manson on June 17, 1906, at Martinez, Ark.—Lee Phillips was married on Thursday, April 19, to Miss Elizabeth Webster Curtis at Maplewood, Mass.—E. F. Rockwood is with the Eastern Expanded Metal Company of Boston, doing office engineering. This company does fireproofing and a good deal of reinforced concrete work.—Richard B. Dole, of the United States Geological Survey, Washington, was married on June 20 to Miss Huldah Humphreys, of Brunswick, Me.—The very latest echo from Cupid's garden comes just as we go to press. Mrs. Ellen Loring Dike, of Braintree, Mass., announces the engagement of her daughter, Frances Elizabeth, to Mr. Merton Leslie Emerson. Ye olde bach hath succumbed.

1905.

R. W. H. LORD, *Sec.*, 248 Tremont Street, Newton Centre, Mass.

The alumni reception was represented by only a few '05 men, about a dozen being present. Of these men H. L. Walker and Bent came from a distance. The class dinner and Pops on June 5, however, brought out a large gathering of our class, there being thirty-five at the dinner and fifty at the Pops. A social hour was spent at the "punch" in Engineering A, where class yells and interclass courtesies were indulged in. The famous anti-merger punch as served by '98 was surely the real thing. The new '05 banner was first displayed at the punch. It is seven by three, royal purple and white. From the "punch" '04 and '05 proceeded to the Oxford, where a

completely informal dinner was held, everybody removing his coat and enjoying life generally. No set speeches were given, President Pritchett being the only speaker. Singing and cheering helped digest the food. Ros. Davis was made to sing a verse of "That Awful Tired Feeling," which came forth in the same old style. Several fellows came from a considerable distance to be present at the dinner. Our two class dinners have been rousing successes, and it is greatly hoped that the men will continue to turn out in such goodly numbers. From the Oxford we marched up to Pops, where we were met by another body of '05 men, making by far the largest class of alumni present. Our position this year in the hall was still at the end, but it was the other end. The evening was spent as at last year's Pops, and, when all was over, everybody pronounced the day's gathering a "mighty good time." At the dinner a collection of news was taken, most of the men present furnishing something. Following is a part of the news receipts: H. L. Walker, Eichler, and Landers with Lanston Monotype Works in Philadelphia, and Goldthwait with same company in Boston.—A. H. Smith to be married June 21, 1906.—Gage sailed for Panama May 29.—Prescott was working with Stone & Webster, State Street, Boston, in January.—Whitney has just had an eight weeks' vacation. "Took trip to Florida, Cuba, and Mexico with his family." Other reports say that this is a wedding trip.—Billy Spaulding came to Boston from Buffalo about June 15.—Kenway came from Washington about July 5.—Dan Harrington is getting along well in Wisconsin.—E. H. Bartlett has charge of laboratory and soap plant of the Waldrich Bleachery, Delawanna, N.J.—Saville has been working for the engineering department of the Massachusetts State Board of Health for the past year.—Seaver was present with his degree.—Henry H. W. Keith married during the summer to Miss Eva Guptill, of Boston.—Morse is doing well with the Barker Asphalt Company.—Chester Allen is with construction department of the Big Four Railroad.—Carl Peiler and Perrie Arnold are driving "ginnies" and building chimneys for the Delano Copper Refining Company, Chrome, N.J.—Geckler is working but twenty-four hours a day now.—Glidden is with testing department of the United States Geological

Survey at Portland, Ore., and we understand he will return in a few weeks.—Bent showed up from Rochester.—Jim Lambie, tired of bossing hunkies at the Lackawanna Steel Company, has gone with the Wabash Railroad.—Jimmy Paine, with tears in his eyes and a pathetic break in his voice, sent his love to the '05 fellows, and said that he would always regret not being able to be with them on June 5. At least, so says Bent.—Davis and Perkins sat together, and it cannot be said who is responsible for the following composition:—

Perk and Ros are sitting here, and Robbie asks for news.

Perk has two d—d tender toes caused by bum-made shoes.

Ros is still a sand-hog, and works in compressed air (sometimes),

And hasn't yet a wife to pull out his blond hair.

(This may mean that Perk has.)—Many letters have been received from fellows expressing their regrets at not being able to be present at our June 5 exercises. Two letters containing news of members of the class have come. A letter from Charlie Johnston expressed the general attitude of the fellows on the news question. In part it is as follows:—

... I am very sorry I cannot be in Boston this June, but, as "Professor Pure Brass" has not, at latest reports, perfected his flying machine, I cannot even make one of those so-called "flying trips." Still, if not present in person I assure you I am with you in spirit. Your news from the class in the last TECH REVIEW was exceedingly interesting, especially Cowper's letter. I would suggest that, when other letters are so interesting, they be published also. I realize how much of a necessity money is for the proper administration of our class affairs, for way back in the Soph year I had a little to do with that end of class matters. . . .

—A note from Beers says that Percival expects to work with the Bell Telephone in Philadelphia.—We have heard from "Bunnie" Loomis:—

... I am acting as purchasing agent for the Dallas (Texas) companies, of which there are four. . . . So manage to find enough to keep me busy most of the time.

—From Jones:—

The whole '05 bunch has left the Lackawanna except myself, and I gave notice to-day. I am going to Washington to work in the Patent Office, and take up patent law.

Louis Robbe writes his usual interesting letter:—

*Dear Bob*,—Am sorry I cannot be in Boston this June, as I see no vacation coming my way until late in the fall. I am located here for a few months while our two plants are being remodelled and enlarged. The work is entirely out of doors, and besides it is very interesting and instructive. How goes the work with you? Am glad the assessment is levied, as a little money should be working toward the treasury every little while. I am enclosing my ante, and it is your play. Richmond wrote me that he was back at Tech as an assistant. Robbins is still in Korea, and I hear from him occasionally. At present he is on a prospecting trip up the Korean coast, and then down into the valley of the Yalu River. A great place to see now after the war. Smart met me in Pittsburgh yesterday, and he promises to come up here [New Kensington] over Sunday. He is with the Carnegie Steel Company. Wish the class a joyous celebration, with plenty of "pop" and ginger to it.

—Belding has gone to the Joplin (Mo.) office of the Sullivan Machinery Company.—Crosby is working in the Patent Office in Washington.—Barnd is in New York, and is engaged in the mining promotion business.—Damon has gone into the Chicago Telephone Company as an assistant construction engineer.—Bill Green has graduated, and is to assist the firm of J. G. White & Co. for the ensuing year.—Parsons also has his degree.—Lyon and Crane are to stay in the electrical department of the Institute.—Wentworth has left the Institute to engage in the development of ore separating machinery.—H. C. Mitchell has left J. G. White & Co., and is connected with Bell River Exploration Company in northern Quebec as a civil engineer.—Crosby writes in part:—

... The '05 fellows that are down here are Ammen, Blair, Guibord, Kenway, and Barrows whom I haven't met. Guibord has become a Benedick, and is also sporting a Vandyke beard. Blair has charge of the Washington office of Howson & Howson. The rest of us are in the Patent Office. Four of us accepted the hospitality of the Tech Club here awhile ago, and



after a pleasant dinner at the University Club we listened to a very interesting talk on firearms. Principal Examiner Rich is president of the club. Some of us have been contemplating getting the '05 fellows together once in a while for a card or theatre party, and, when we do, I expect a great burst of enthusiasm.

—Bill Motter has at last been heard from. His address is Mina San Diego, Santa Barbara, Chihuahua, Mexico. His letter was a good one when it did come. Parts of it run as follows:—

... I had a row with the old company, so quit them, leaving there on Easter Sunday. I then struck a job here with the Cia Metalurgical de Toureon, a Mexican concern, but these are their mines and run by foreigners. I started in as a mechanic in the mill. Later had the chance of choosing between day shift boss of the mill or going on trial as engineer (not a man who runs an engine). Besides making mine plans, I am now in charge of a lot of construction of tramways, as our system is quite extensive. At the other mine it was a great country! Seventy-five miles from a post-office, and one other white man in the place. All the riding you wanted; good deer and bear shooting within half a day's ride. Always wearing your gun loose in the holster, so that no Mexican could get the drop on you. It was wonderful how good and peaceable they were! [After Hepburn and I did a little fancy shooting.] We used to plunk at rabbits from the house, and often got them; got to be a pretty good shot, and in the standard of the Mexican we were pretty well up. And now let me tell you that this Mexican is a badly misunderstood individual in the States. He is a good workman, if you understand him, and, if you treat him right and square, will make a friend that will do a world of things for you. Taking it altogether, this is a mighty good country, and there is a lot doing for a man who will come down, learn the language, and intend to stay awhile. But get your job before you come, as it is hard to pick one up on the spur of the moment and without much experience.

I have before me a programme of Senior Week. The Glee Club Concert, etc., but I wish I could be with you Tuesday night. I am now homesick for a good, exciting "Pop" night. Tell all the boys to write to me. I have heard from very few.

I am more lonely here than I was out at the other mine, although sometimes I would not see a gringo for six weeks except Hepburn, and here there are a whole raft of them. When I used to ride into Parral from out there, it was like coming into an American city, you saw so many gringos on the street, and I used to want to yank off my hat and give them a "We are



happy" with Teddy Roosevelt and U. S. A. on the end, but they are as civilized and cold as in Boston.

I am now living alone in three rooms, and need a wife very badly. Do you know of one that is a good cook! If so, send her down. The Chinaman's grub is rank. At the other mine we lived on "frijoles y tortillos," and, I tell you, they are fine. I appreciate those corn and bean affairs now that I am eating imitation American grub spoiled by a Chink.

—The secretaries have had all sorts of things to do, but Bill has put on the finishing touches in asking us to send him a wife.—Another good letter comes from Ned Jewett:—

I am just now recuperating from an operation for appendicitis. I had to be so darn stylish, so they hustled me to an infirmary and whittled on me. Am now gaining weight and strength fast. While I was in the infirmary, Tede Green came down from Cincinnati to see me. Doc. Mqorehead came down from the same place the week after. I expect to go up there this week and see them, also Duke Turner. I am still with the Southern Roofing and Concrete Company, and have charge of the concrete department.

I wish I was going to be with you at the "Pops." I will some day, though.

—We have been requested from various sources to advertise and find out whether or not Jim Lambie has finished his thesis. Jim, please answer.—In George Jones's return with his class assessment we found "Enclosed please find three days' salary. Treasure it carefully: I can't do it again."—The engagement has just been announced of W. K. Lewis to Miss Rosalind Kenway, a sister of H. W. Kenway, '05. "Doc" starts for Germany in August for two years' study in one of the universities.—Charles B. Magruder, Sp. '05, of Olney, Md., died in Cleveland, Ohio, March 9, 1904, of typhoid fever.—We have received from the class assessment so far \$85. As we had about \$50 against us in bills payable, this does not leave the treasury very well off. Every one stir up every one else, and give us money enough to work with. The secretary and vice-secretary's job is bad enough, but those combined with no money are the limit.—1905 has done well with the Income Fund. At present we have 186 subscriptions. Our nearest competitor, 1904, has 126. Of the total number of men on the mailing list, 36.3 per cent. subscribed. 1903 was our nearest competitor, with

35.6 per cent. We were twenty-second on the total amount subscribed. We pledged \$4,800. Of course we could not expect to pledge as much as the older classes. The interest shown was what we wanted, and that we got. Lord was asked to act as chairman of the committee by the Technology Fund Committee, and he asked Bushnell and Wentworth to serve. Later this committee was found to be too small, so Messrs. Adams, Broad, Elliott, Bartlett, Perkins, Parsons, Lyon, Folsom, Tower, Long, and Lewis were added to the original committee. The chairman wishes to take this opportunity to thank the members of this committee for their efficient services, and also to thank the class for their loyalty and interest displayed.—The following letter has been received from Robert H. Richards, '68. Any one having any names to remit will please send them in immediately.

I am writing to you in behalf of the Nominating Committee of the Alumni Association, and especially in regard to the nomination of term members of the Institute of Technology Corporation.

The committee desire to hear from your class as to whether you have names you would like to suggest for term membership.

—The following are the changes of address reported the past three months. Other men whose change of address has not been noted in the REVIEW will confer a favor by notifying the secretary: A. F. Belding, Sullivan Machine Company, Joplin, Mo.; C. A. Butman, 43 Elm Street, West Lynn, Mass.; S. L. Cole, 13 Lincoln Street, Somerville, Mass.; J. C. Damon, 963 Washington Boulevard, Chicago, Ill.; A. C. Gilbert, 46 William Street, Cambridge, Mass. (with Merrimac Chemical Company); George Jason, Jr., New England Telephone & Telegraph Company, Cohasset, Mass.; M. B. Landers, 3121 Columbus Avenue, Philadelphia, Pa.; J. S. Loughlin, 197 De Kalb Avenue, Brooklyn, N.Y.; L. C. Pickersgill, 299 Broadway, New York, N.Y.; A. S. Prince, 108 West 4th Street, Cincinnati, Ohio; G. I. Rhodes, Interborough Railroad Company, 59th Street, New York, N.Y.; G. W. C. Whiting, Low Level Division of Sewerage Committee, Ingraham Building, Baltimore, Md.; C. N. Rogers, Box 66, Phoenixville, Pa.; H. A. Wentworth, 60 India

Street, Boston, Mass.; W. S. Richmond, surveyor for U. S. L. S., 33 Campan Building, Detroit, Mich.; W. O. Tuck, chemist for Sherwin-Williams Paint Company, Hotel Florence, Pullman, Ill.; C. Robert Adams, United States Geological Survey, Attean Camps, Jackman, Me.; Converse Smith, with the Pennsylvania Railroad Company, Cresson, Pa.; Jules V. Barnd, in mining promotion business, 50 Broadway, New York, N.Y.; W. C. Gilman, 144 Nahant Street, Lynn, Mass.; R. K. Forsyth, 2908 West Avenue, Newport News, Va.; E. H. Bartlett, Passaic, N.J.; I. A. Murr, 7 Broadway, Albany, N.Y.

1906.

THOMAS L. HINCKLEY, *Sec.*, 745 Osceola Ave., St. Paul, Minn.

A. T. HEYWOOD, *Resident Sec.*, Mass. Inst. of Tech., Boston.

The class of 1906 sends into the world 273 men and 4 women, thus amply fulfilling the prediction made in the last issue of this magazine, that there would be at least 250 graduates. We have overheard several alumni remarking that, "when they went to Tech, the faculty didn't pass 'em all, as they do now," and we wish to assure these men that the faculty has not been any more lenient with 1906 than with them. Of the original 481 composing the class of 1906 in its Freshman year, only 167 graduated last June, the difference being made up by men from other schools and other classes at the Institute. One thing, however, seems clear. The "weeding-out" process has in our case been done perhaps more effectually during the first three years, leaving fewer men to be disappointed at the end,—a course which is certainly wiser both for the Faculty and for the unfortunate students.—It is too early to give any information as to the distribution of 1906 men. Of the graduates of Course I., many have gone into railroad work in the West, and two at least are bound for South America. The mechanical engineering graduates seem to have found satisfactory employment largely in the East. Quite a number of Course III. men will go to Mexico. Course VIII. seems to have developed a strong affection for the Institute. The

chemists evidently prefer the East. Very few of the graduates in Course XIII. had decided on their work, but opportunities in the vicinity of the Great Lakes were the most promising. More definite news of the graduates will be forthcoming later.—Aided by perfect weather, the various events of "Senior Week" went off to the entire satisfaction of the Class Day Committee, and, it is hoped, of the guests of the class as well. It was the first time that the Class Day Committee had attempted to take charge of all the undergraduate festivities, and the plan seemed to be successful. Over 250 men turned out for the class banquet at the American House, the first of the Commencement celebrations, and the spirit with which the men supported the dinner was kept up throughout the week. Accounts of the various events appear elsewhere. Perhaps the greatest surprise was occasioned by the alumni reception, which proved anything but a tame affair. We don't know how our sedate alumni liked the potato race and pie-eating contest, but their little stunts were very acceptable to us. The grand finale of the season, the Pop Concert, being almost an entirely alumni affair, reflects glory upon all alike. However, we would like to see 1907 beat our record for attendance and enthusiasm. Finally, the class of 1906 finds itself well pleased to join that Greater Technology which exists throughout the world in the hearts of all loyal Technology men. We hope to have our share in its future successes, and to do what we can to enhance them. Most of us feel that, while graduation is a great thing, it merely opens the way to greater things, and that not the least of these is loyalty to the Institute. It is surely the wish of all of us that "she may live long and prosper."—The engagement of Mr. Hermann C. Henrici to Miss Lois Ashbrook Oldham was announced on June 24, 1906. Hooray for Hermann! First marshal and first engaged of our new-born alumni, he has set a pace which others of us must hustle to beat. We are sure that the whole class of 1906 joins with us in heartiest congratulations to the happy principals in this affair, and in oceans of best wishes for the future.—Angelo T. Heywood has been elected resident secretary, class of 1906. Communications may be addressed to him or to T. C. Hinckley.

## BOOK REVIEW.

## MECHANICAL DRAWING FOR TECHNICAL STUDENTS

By CHARLES L. ADAMS. Boston: Geo. H. Ellis Co., 1905.

Mechanical drawing is but a means to an end, that end being the completed piece or machine. The draughtsman is but a recorder of ideas which the drawing, unaided, conveys to the artisan. Success, therefore, rests upon attention to many details.

The author has wisely chosen to deal only with the technique and working methods of mechanical drawing, leaving to a course in descriptive geometry the treatment of the independent principles of the subject. The result is a veritable guide-book, which directs the beginner, step by step, leads him past the pitfalls and reveals every short cut. The minuteness of the instructions conserves time in the attainment of knowledge and skill. Although primarily designed for class instruction, this work is of marked value to the individual who must do without a teacher.

It is manifestly a book written out of the author's extended experience, one in which each individual statement bears evidence of most careful consideration, where every word counts and every illustration proves its necessity. The eight by ten inch pages, 204 in number, are of ample size for clearly presenting these illustrations, which include 160 figures and 23 full-page plates. All are admirably reproduced.

In the text are given instructions regarding the selection, use and care of drawing instruments and materials, methods of rendering and lettering, drawing from the object and making wash, working and isometric drawings. One chapter is devoted to problems in geometrical construction, and the closing pages to methods of mechanical copying, including blue printing and reproduction by line and half-tone processes. A very complete index adds materially to the utility of the book.

W. B. SNOW, '82.